

Table S3. List of 2709 accessory genes presented in Figure 4, in order from left to right. Genes are described by isolate code (patient code followed by hospital code, MBL variant (where applicable) and time of collection (month/year)) and specific locus tags linked to ENA submissions ERS716506 to ERS716591 inclusive. Annotations were prokka-generated ([www.vicbioinformatics.com/software/prokka.shtml](http://www.vicbioinformatics.com/software/prokka.shtml)).

P28\_London\_17\_02\_11\_00004 Alpha/beta hydrolase family protein  
P28\_London\_17\_02\_11\_00005 hypothetical protein  
P28\_London\_17\_02\_11\_00006 hypothetical protein  
P28\_London\_17\_02\_11\_00007 hypothetical protein  
P28\_London\_17\_02\_11\_00008 hypothetical protein  
P28\_London\_17\_02\_11\_00009 hypothetical protein  
P28\_London\_17\_02\_11\_00010 hypothetical protein  
P28\_London\_17\_02\_11\_00011 hypothetical protein  
P28\_London\_17\_02\_11\_00012 hypothetical protein  
P28\_London\_17\_02\_11\_00013 hypothetical protein  
P28\_London\_17\_02\_11\_00017 Erythronate-4-phosphate dehydrogenase  
P28\_London\_17\_02\_11\_00025 hypothetical protein  
P28\_London\_17\_02\_11\_00026 50S ribosomal protein L3 glutamine methyltransferase  
P28\_London\_17\_02\_11\_00027 hypothetical protein  
P28\_London\_17\_02\_11\_00032 hypothetical protein  
P28\_London\_17\_02\_11\_00040 DNA-invertase hin  
P28\_London\_17\_02\_11\_00041 RNase II stability modulator  
P28\_London\_17\_02\_11\_00043 hypothetical protein  
P28\_London\_17\_02\_11\_00055 hypothetical protein  
P28\_London\_17\_02\_11\_00073 Thiosulfate sulfurtransferase GlpE  
P28\_London\_17\_02\_11\_00074 DSBA-like thioredoxin domain protein

P28\_London\_17\_02\_11\_00076 hypothetical protein

P28\_London\_17\_02\_11\_00079 Mycocerosic acid synthase

P28\_London\_17\_02\_11\_00081 HTH-type transcriptional repressor of iron proteins A

P28\_London\_17\_02\_11\_00114 Arginine N-succinyltransferase subunit beta

P28\_London\_17\_02\_11\_00116 N-succinylarginine dihydrolase

P28\_London\_17\_02\_11\_00123 tRNA-Ser(gct)

P28\_London\_17\_02\_11\_00124 tRNA-Arg(acg)

P28\_London\_17\_02\_11\_00134 hypothetical protein

P28\_London\_17\_02\_11\_00135 hypothetical protein

P28\_London\_17\_02\_11\_00157 Aspartyl/Asparaginyl beta-hydroxylase

P28\_London\_17\_02\_11\_00171 NAD(P)H dehydrogenase (quinone)

P28\_London\_17\_02\_11\_00175 hypothetical protein

P28\_London\_17\_02\_11\_00177 Acylphosphatase

P28\_London\_17\_02\_11\_00183 Protein SlyX

P28\_London\_17\_02\_11\_00188 Methyl-accepting chemotaxis protein PctC

P28\_London\_17\_02\_11\_00191 hypothetical protein

P28\_London\_17\_02\_11\_00194 tRNA-Ala(tgc)

P28\_London\_17\_02\_11\_00195 tRNA-Ile(gat)

P28\_London\_17\_02\_11\_00196 16S ribosomal RNA

P28\_London\_17\_02\_11\_00200 hypothetical protein

P28\_London\_17\_02\_11\_00201 hypothetical protein

P28\_London\_17\_02\_11\_00205 putative isochorismatase

P28\_London\_17\_02\_11\_00209 ParB-like nuclease domain protein

P28\_London\_17\_02\_11\_00211 hypothetical protein

P28\_London\_17\_02\_11\_00212 hypothetical protein

P28\_London\_17\_02\_11\_00219 hypothetical protein

P28\_London\_17\_02\_11\_00220 ISXO2-like transposase domain protein

P28\_London\_17\_02\_11\_00221 hypothetical protein

P28\_London\_17\_02\_11\_00222 hypothetical protein

P28\_London\_17\_02\_11\_00231 HTH-type transcriptional activator CmpR

P28\_London\_17\_02\_11\_00233 HTH-type transcriptional activator Btr

P28\_London\_17\_02\_11\_00247 Type I secretion system membrane fusion protein PrsE

P28\_London\_17\_02\_11\_00248 Type I secretion system ATP-binding protein PrsD

P28\_London\_17\_02\_11\_00249 hypothetical protein

P28\_London\_17\_02\_11\_00259 p-hydroxybenzoic acid efflux pump subunit AaeB

P28\_London\_17\_02\_11\_00269 Membrane-bound lytic murein transglycosylase A precursor

P28\_London\_17\_02\_11\_00276 putative sulfoacetate--CoA ligase

P28\_London\_17\_02\_11\_00280 Alpha/beta hydrolase family protein

P28\_London\_17\_02\_11\_00303 Formyl-coenzyme A transferase

P28\_London\_17\_02\_11\_00306 Disulfide-bond oxidoreductase YfcG

P28\_London\_17\_02\_11\_00314 Periplasmic nitrate reductase protein NapE

P28\_London\_17\_02\_11\_00315 Electron transport complex subunit RsbB

P28\_London\_17\_02\_11\_00318 Periplasmic nitrate reductase%2C electron transfer subunit precursor

P28\_London\_17\_02\_11\_00320 Membrane-bound lytic murein transglycosylase B precursor

P28\_London\_17\_02\_11\_00338 hypothetical protein

P28\_London\_17\_02\_11\_00339 hypothetical protein

P28\_London\_17\_02\_11\_00348 hypothetical protein

P28\_London\_17\_02\_11\_00349 hypothetical protein

P28\_London\_17\_02\_11\_00350 hypothetical protein

P28\_London\_17\_02\_11\_00351 hypothetical protein

P28\_London\_17\_02\_11\_00352 hypothetical protein

P28\_London\_17\_02\_11\_00353 hypothetical protein

P28\_London\_17\_02\_11\_00354 hypothetical protein

P28\_London\_17\_02\_11\_00355 hypothetical protein

P28\_London\_17\_02\_11\_00356 Mor transcription activator family protein

P28\_London\_17\_02\_11\_00357 hypothetical protein

P28\_London\_17\_02\_11\_00358 hypothetical protein

P28\_London\_17\_02\_11\_00359 hypothetical protein

P28\_London\_17\_02\_11\_00360 hypothetical protein

P28\_London\_17\_02\_11\_00369 hypothetical protein

P28\_London\_17\_02\_11\_00370 ComEC family competence protein

P28\_London\_17\_02\_11\_00372 biopolymer transport protein ExbD

P28\_London\_17\_02\_11\_00373 Tetraacyldisaccharide 4'-kinase

P28\_London\_17\_02\_11\_00380 Phosphoglycolate phosphatase

P28\_London\_17\_02\_11\_00409 putative cobalt transporter subunit (CbtB)

P28\_London\_17\_02\_11\_00413 Magnesium-chelatase 38 kDa subunit

P28\_London\_17\_02\_11\_00417 Uric acid transporter UacT

P28\_London\_17\_02\_11\_00424 N-ethylmaleimide reductase

P28\_London\_17\_02\_11\_00437 hypothetical protein

P28\_London\_17\_02\_11\_00449 Precorrin-6Y C(5%2C15)-methyltransferase [decarboxylating]

P28\_London\_17\_02\_11\_00458 hypothetical protein

P28\_London\_17\_02\_11\_00462 hypothetical protein

P28\_London\_17\_02\_11\_00465 Acetyl-/propionyl-coenzyme A carboxylase alpha chain

P28\_London\_17\_02\_11\_00479 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_00494 Lipase chaperone

P28\_London\_17\_02\_11\_00497 hypothetical protein

P28\_London\_17\_02\_11\_00500 Transposase

P28\_London\_17\_02\_11\_00502 Transposase IS66 family protein

P28\_London\_17\_02\_11\_00508 Putrescine-binding periplasmic protein precursor

P28\_London\_17\_02\_11\_00509 hypothetical protein

P28\_London\_17\_02\_11\_00510 Bacteriophage Mu Gam like protein

P28\_London\_17\_02\_11\_00511 hypothetical protein

P28\_London\_17\_02\_11\_00512 hypothetical protein

P28\_London\_17\_02\_11\_00513 hypothetical protein

P28\_London\_17\_02\_11\_00514 hypothetical protein

P28\_London\_17\_02\_11\_00515 hypothetical protein

P28\_London\_17\_02\_11\_00516 hypothetical protein

P28\_London\_17\_02\_11\_00517 hypothetical protein

P28\_London\_17\_02\_11\_00521 hypothetical protein

P28\_London\_17\_02\_11\_00531 Aminoglycoside 3'-phosphotransferase

P28\_London\_17\_02\_11\_00540 Beta-lactamase precursor

P28\_London\_17\_02\_11\_00574 Fimbrial protein

P28\_London\_17\_02\_11\_00584 hypothetical protein

P28\_London\_17\_02\_11\_00587 UDP-glucose 4-epimerase

P28\_London\_17\_02\_11\_00591 macrolide transporter ATP-binding /permease protein

P28\_London\_17\_02\_11\_00592 putative ABC transporter ATP-binding protein/MT1014

P28\_London\_17\_02\_11\_00595 Thioredoxin-1

P28\_London\_17\_02\_11\_00603 hypothetical protein

P28\_London\_17\_02\_11\_00610 Vitamin B12-binding protein precursor

P28\_London\_17\_02\_11\_00611 1-deoxy-D-xylulose-5-phosphate synthase

P28\_London\_17\_02\_11\_00627 Serine/threonine-protein kinase Pkn1

P28\_London\_17\_02\_11\_00633 Beta-lactamase precursor

P28\_London\_17\_02\_11\_00634 Aminoglycoside 2'-N-acetyltransferase

P28\_London\_17\_02\_11\_00635 hypothetical protein

P28\_London\_17\_02\_11\_00644 hypothetical protein

P28\_London\_17\_02\_11\_00646 fec operon regulator FecR

P28\_London\_17\_02\_11\_00651 Outer membrane protein TolC precursor

P28\_London\_17\_02\_11\_00652 hypothetical protein

P28\_London\_17\_02\_11\_00661 ABC-2 family transporter protein

P28\_London\_17\_02\_11\_00662 Daunorubicin/doxorubicin resistance ATP-binding protein DrrA

P28\_London\_17\_02\_11\_00663 Periplasmic copper-binding protein (NosD)

P28\_London\_17\_02\_11\_00681 Alpha-D-ribose 1-methylphosphonate 5-triphosphate synthase subunit PhnL

P28\_London\_17\_02\_11\_00682 Alpha-D-ribose 1-methylphosphonate 5-triphosphate diphosphatase

P28\_London\_17\_02\_11\_00740 hypothetical protein

P28\_London\_17\_02\_11\_00751 hypothetical protein

P28\_London\_17\_02\_11\_00757 Purine efflux pump PbuE

P28\_London\_17\_02\_11\_00758 IS2 transposase TnpB

P28\_London\_17\_02\_11\_00760 hypothetical protein

P28\_London\_17\_02\_11\_00761 hypothetical protein

P28\_London\_17\_02\_11\_00764 hypothetical protein

P28\_London\_17\_02\_11\_00765 hypothetical protein

P28\_London\_17\_02\_11\_00767 impB/mucB/samB family protein

P28\_London\_17\_02\_11\_00768 Cell division inhibitor Sula

P28\_London\_17\_02\_11\_00769 Heme oxygenase

P28\_London\_17\_02\_11\_00770 hypothetical protein

P28\_London\_17\_02\_11\_00771 Ferripyoverdine receptor precursor

P28\_London\_17\_02\_11\_00772 RNA polymerase sigma factor

P28\_London\_17\_02\_11\_00773 fec operon regulator FecR

P28\_London\_17\_02\_11\_00774 Pseudopilin GspJ

P28\_London\_17\_02\_11\_00775 hypothetical protein

P28\_London\_17\_02\_11\_00776 hypothetical protein

P28\_London\_17\_02\_11\_00777 Bacterial type II secretion system protein I/J

P28\_London\_17\_02\_11\_00778 Type II secretion system protein G precursor

P28\_London\_17\_02\_11\_00779 General secretion pathway protein K

P28\_London\_17\_02\_11\_00780 GspL periplasmic domain protein

P28\_London\_17\_02\_11\_00781 General secretion pathway%2C M protein

P28\_London\_17\_02\_11\_00782 Putative type II secretion system protein D precursor

P28\_London\_17\_02\_11\_00783 Type II secretion system protein E

P28\_London\_17\_02\_11\_00784 Type II secretion system protein F

P28\_London\_17\_02\_11\_00785 Phosphate-binding protein

P28\_London\_17\_02\_11\_00786 Heme/hemopexin-binding protein precursor

P28\_London\_17\_02\_11\_00787 hypothetical protein

P28\_London\_17\_02\_11\_00788 Heme/hemopexin transporter protein HuxB precursor

P28\_London\_17\_02\_11\_00789 Biopolymer transport protein ExbB

P28\_London\_17\_02\_11\_00790 Biopolymer transport protein ExbD

P28\_London\_17\_02\_11\_00791 hypothetical protein

P28\_London\_17\_02\_11\_00792 hypothetical protein

P28\_London\_17\_02\_11\_00793 hypothetical protein

P28\_London\_17\_02\_11\_00794 hypothetical protein

P28\_London\_17\_02\_11\_00795 Foldase protein PrsA 2 precursor

P28\_London\_17\_02\_11\_00796 hypothetical protein

P28\_London\_17\_02\_11\_00797 DNA-binding transcriptional regulator DsdC

P28\_London\_17\_02\_11\_00798 HTH-type transcriptional activator RhaS

P28\_London\_17\_02\_11\_00799 Fatty acid hydroxylase superfamily protein

P28\_London\_17\_02\_11\_00800 Proline/betaine transporter

P28\_London\_17\_02\_11\_00801 Acylamidase

P28\_London\_17\_02\_11\_00802 Putative glycosyltransferase EpsE

P28\_London\_17\_02\_11\_00803 Chloramphenicol acetyltransferase

P28\_London\_17\_02\_11\_00804 Exotoxin A regulatory protein

P28\_London\_17\_02\_11\_00805 HTH-type transcriptional regulator GltR

P28\_London\_17\_02\_11\_00806 Autoinducer 2-degrading protein LsrG

P28\_London\_17\_02\_11\_00807 Lactoylglutathione lyase

P28\_London\_17\_02\_11\_00808 hypothetical protein

P28\_London\_17\_02\_11\_00809 hypothetical protein

P28\_London\_17\_02\_11\_00810 hypothetical protein

P28\_London\_17\_02\_11\_00811 hypothetical protein

P28\_London\_17\_02\_11\_00812 HTH-type transcriptional regulator BenM

P28\_London\_17\_02\_11\_00813 Hca operon transcriptional activator

P28\_London\_17\_02\_11\_00814 hypothetical protein

P28\_London\_17\_02\_11\_00815 Prophage CP4-57 regulatory protein (AlpA)

P28\_London\_17\_02\_11\_00816 Sporulation initiation inhibitor protein Soj

P28\_London\_17\_02\_11\_00817 hypothetical protein

P28\_London\_17\_02\_11\_00818 hypothetical protein

P28\_London\_17\_02\_11\_00819 hypothetical protein

P28\_London\_17\_02\_11\_00820 hypothetical protein

P28\_London\_17\_02\_11\_00821 hypothetical protein

P28\_London\_17\_02\_11\_00822 RES domain protein

P28\_London\_17\_02\_11\_00823 hypothetical protein

P28\_London\_17\_02\_11\_00824 hypothetical protein

P28\_London\_17\_02\_11\_00825 Single-stranded DNA-binding protein

P28\_London\_17\_02\_11\_00826 DNA topoisomerase 3

P28\_London\_17\_02\_11\_00827 hypothetical protein

P28\_London\_17\_02\_11\_00828 hypothetical protein

P28\_London\_17\_02\_11\_00829 hypothetical protein

P28\_London\_17\_02\_11\_00830 hypothetical protein

P28\_London\_17\_02\_11\_00831 hypothetical protein

P28\_London\_17\_02\_11\_00832 hypothetical protein

P28\_London\_17\_02\_11\_00833 hypothetical protein

P28\_London\_17\_02\_11\_00834 hypothetical protein



P28\_London\_17\_02\_11\_00835 hypothetical protein

P28\_London\_17\_02\_11\_00836 hypothetical protein

P28\_London\_17\_02\_11\_00837 hypothetical protein

P28\_London\_17\_02\_11\_00838 hypothetical protein

P28\_London\_17\_02\_11\_00839 hypothetical protein

P28\_London\_17\_02\_11\_00840 hypothetical protein

P28\_London\_17\_02\_11\_00841 hypothetical protein

P28\_London\_17\_02\_11\_00842 Transglycosylase SLT domain protein

P28\_London\_17\_02\_11\_00843 hypothetical protein

P28\_London\_17\_02\_11\_00844 TraM recognition site of TraD and TraG

P28\_London\_17\_02\_11\_00845 hypothetical protein

P28\_London\_17\_02\_11\_00846 hypothetical protein

P28\_London\_17\_02\_11\_00847 hypothetical protein

P28\_London\_17\_02\_11\_00848 Patatin-like phospholipase

P28\_London\_17\_02\_11\_00849 Cyclic AMP-GMP synthase

P28\_London\_17\_02\_11\_00850 thiamine biosynthesis protein ThiF

P28\_London\_17\_02\_11\_00852 RecBCD enzyme subunit RecB

P28\_London\_17\_02\_11\_00853 hypothetical protein

P28\_London\_17\_02\_11\_00854 Type III restriction enzyme%2C res subunit

P28\_London\_17\_02\_11\_00855 hypothetical protein

P28\_London\_17\_02\_11\_00856 hypothetical protein

P28\_London\_17\_02\_11\_00857 AIPR protein

P28\_London\_17\_02\_11\_00858 RNA polymerase-associated protein RapA

P28\_London\_17\_02\_11\_00859 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_00860 Plasmid protein of unknown function (Plasmid\_RAQPRD)

P28\_London\_17\_02\_11\_00861 hypothetical protein

P28\_London\_17\_02\_11\_00862 hypothetical protein

P28\_London\_17\_02\_11\_00863 hypothetical protein

P28\_London\_17\_02\_11\_00864 hypothetical protein

P28\_London\_17\_02\_11\_00865 hypothetical protein

P28\_London\_17\_02\_11\_00866 hypothetical protein

P28\_London\_17\_02\_11\_00867 hypothetical protein

P28\_London\_17\_02\_11\_00868 F pilus assembly Type-IV secretion system for plasmid transfer

P28\_London\_17\_02\_11\_00869 hypothetical protein

P28\_London\_17\_02\_11\_00870 hypothetical protein

P28\_London\_17\_02\_11\_00871 ABC-2 family transporter protein

P28\_London\_17\_02\_11\_00872 hypothetical protein

P28\_London\_17\_02\_11\_00873 hypothetical protein

P28\_London\_17\_02\_11\_00874 hypothetical protein

P28\_London\_17\_02\_11\_00876 Transposase IS200 like protein

P28\_London\_17\_02\_11\_00877 hypothetical protein

P28\_London\_17\_02\_11\_00878 hypothetical protein

P28\_London\_17\_02\_11\_00901 MarR family protein

P28\_London\_17\_02\_11\_00905 2%2C5-dichloro-2%2C5-cyclohexadiene-1%2C4-diol dehydrogenase

P28\_London\_17\_02\_11\_00909 hypothetical protein

P28\_London\_17\_02\_11\_00917 Glutaminase 2

P28\_London\_17\_02\_11\_00935 Threonine efflux protein

P28\_London\_17\_02\_11\_00960 hypothetical protein

P28\_London\_17\_02\_11\_00978 hypothetical protein

P28\_London\_17\_02\_11\_00983 hypothetical protein

P28\_London\_17\_02\_11\_00986 HTH-type transcriptional activator CmpR

P28\_London\_17\_02\_11\_00991 hypothetical protein

P28\_London\_17\_02\_11\_00994 EamA-like transporter family protein

P28\_London\_17\_02\_11\_01028 Adenosine monophosphate-protein transferase SoFic

P28\_London\_17\_02\_11\_01030 tRNA-Met(cat)

P28\_London\_17\_02\_11\_01057 DnaJ-like protein DjIA

P28\_London\_17\_02\_11\_01067 Phosphoglycolate phosphatase

P28\_London\_17\_02\_11\_01072 RNA polymerase-binding transcription factor DksA

P28\_London\_17\_02\_11\_01074 hypothetical protein

P28\_London\_17\_02\_11\_01100 ATP-dependent zinc metalloprotease FtsH

P28\_London\_17\_02\_11\_01113 Phenazine biosynthesis protein PhzB 2

P28\_London\_17\_02\_11\_01115 hypothetical protein

P28\_London\_17\_02\_11\_01117 HTH-type transcriptional regulator CatM

P28\_London\_17\_02\_11\_01128 hypothetical protein

P28\_London\_17\_02\_11\_01151 Kipl antagonist

P28\_London\_17\_02\_11\_01161 hypothetical protein

P28\_London\_17\_02\_11\_01162 SnoaL-like domain protein

P28\_London\_17\_02\_11\_01170 putative fimbrial protein

P28\_London\_17\_02\_11\_01171 Chaperone protein EcpD precursor

P28\_London\_17\_02\_11\_01175 Phytochrome-like protein cph2

P28\_London\_17\_02\_11\_01185 General stress protein 39

P28\_London\_17\_02\_11\_01193 putative Mg(2+) transport ATPase

P28\_London\_17\_02\_11\_01194 hypothetical protein

P28\_London\_17\_02\_11\_01200 Putative cardiolipin synthase YbhO

P28\_London\_17\_02\_11\_01201 hypothetical protein

P28\_London\_17\_02\_11\_01202 hypothetical protein

P28\_London\_17\_02\_11\_01206 hypothetical protein

P28\_London\_17\_02\_11\_01212 hypothetical protein

P28\_London\_17\_02\_11\_01218 hypothetical protein

P28\_London\_17\_02\_11\_01219 hypothetical protein

P28\_London\_17\_02\_11\_01221 hypothetical protein

P28\_London\_17\_02\_11\_01232 HTH-type transcriptional regulator RutR

P28\_London\_17\_02\_11\_01234 Sulfate transport system permease protein CysT

P28\_London\_17\_02\_11\_01240 Inner membrane protein YedI

P28\_London\_17\_02\_11\_01242 hypothetical protein

P28\_London\_17\_02\_11\_01247 HTH-type transcriptional regulator CdhR

P28\_London\_17\_02\_11\_01253 hypothetical protein

P28\_London\_17\_02\_11\_01255 hypothetical protein

P28\_London\_17\_02\_11\_01263 HTH-type transcriptional repressor Bm3R1

P28\_London\_17\_02\_11\_01270 Phosphotransferase enzyme family protein

P28\_London\_17\_02\_11\_01274 hypothetical protein

P28\_London\_17\_02\_11\_01285 hypothetical protein

P28\_London\_17\_02\_11\_01291 Inner membrane ABC transporter permease protein YejE

P28\_London\_17\_02\_11\_01302 Sensor protein RstB

P28\_London\_17\_02\_11\_01306 tRNA-His(gtg)

P28\_London\_17\_02\_11\_01307 tRNA-Leu(tag)

P28\_London\_17\_02\_11\_01309 tRNA-Arg(tct)

P28\_London\_17\_02\_11\_01323 Nitrate transporter

P28\_London\_17\_02\_11\_01396 Glycine zipper 2TM domain protein

P28\_London\_17\_02\_11\_01397 hypothetical protein

P28\_London\_17\_02\_11\_01411 Tripartite ATP-independent periplasmic transporters%2C DctQ component

P28\_London\_17\_02\_11\_01419 Phage integrase family protein

P28\_London\_17\_02\_11\_01420 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_01421 hypothetical protein

P28\_London\_17\_02\_11\_01422 hypothetical protein

P28\_London\_17\_02\_11\_01423 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_01424 hypothetical protein

P28\_London\_17\_02\_11\_01425 DNA primase TraC

P28\_London\_17\_02\_11\_01426 hypothetical protein

P28\_London\_17\_02\_11\_01427 hypothetical protein

P28\_London\_17\_02\_11\_01428 Ogr/Delta-like zinc finger

P28\_London\_17\_02\_11\_01429 Phage major capsid protein%2C P2 family

P28\_London\_17\_02\_11\_01430 hypothetical protein

P28\_London\_17\_02\_11\_01431 tRNA-Thr(tgt)

P28\_London\_17\_02\_11\_01443 tRNA-Phe(gaa)

P28\_London\_17\_02\_11\_01445 putative Fe(2+)-trafficking protein

P28\_London\_17\_02\_11\_01450 Acetyltransferase%2C GNAT family

P28\_London\_17\_02\_11\_01458 Bacterial extracellular solute-binding proteins%2C family 3

P28\_London\_17\_02\_11\_01465 Thiosulfate sulfurtransferase GlpE

P28\_London\_17\_02\_11\_01479 Redox-sensitive transcriptional activator SoxR

P28\_London\_17\_02\_11\_01488 Outer membrane lipoprotein Blc precursor

P28\_London\_17\_02\_11\_01507 Sel1 repeat

P28\_London\_17\_02\_11\_01508 Sel1 repeat

P28\_London\_17\_02\_11\_01512 Enamine/imine deaminase

P28\_London\_17\_02\_11\_01525 Sec-independent protein translocase protein TatC

P28\_London\_17\_02\_11\_01526 Sec-independent protein translocase protein TatB

P28\_London\_17\_02\_11\_01535 Poly(hydroxyalcanoate) granule associated protein (phasin)

P28\_London\_17\_02\_11\_01543 cell division protein FtsN

P28\_London\_17\_02\_11\_01556 Shikimate kinase 1

P28\_London\_17\_02\_11\_01558 hypothetical protein

P28\_London\_17\_02\_11\_01562 hypothetical protein

P28\_London\_17\_02\_11\_01616 1%2C2-epoxyphenylacetyl-CoA isomerase

P28\_London\_17\_02\_11\_01630 hypothetical protein

P28\_London\_17\_02\_11\_01633 hypothetical protein

P28\_London\_17\_02\_11\_01646 Epoxyqueuosine reductase

P28\_London\_17\_02\_11\_01652 RNA-binding protein Hfq

P28\_London\_17\_02\_11\_01677 Thermolabile hemolysin precursor

P28\_London\_17\_02\_11\_01695 4-hydroxybenzoate transporter PcaK

P28\_London\_17\_02\_11\_01703 fec operon regulator FecR

P28\_London\_17\_02\_11\_01704 HupE / UreJ protein

P28\_London\_17\_02\_11\_01717 hypothetical protein

P28\_London\_17\_02\_11\_01722 Osmotically-inducible lipoprotein E precursor

P28\_London\_17\_02\_11\_01749 hypothetical protein

P28\_London\_17\_02\_11\_01781 hypothetical protein

P28\_London\_17\_02\_11\_01784 hypothetical protein

P28\_London\_17\_02\_11\_01799 tRNA-seC(tca)

P28\_London\_17\_02\_11\_01803 Shikimate kinase

P28\_London\_17\_02\_11\_01807 Acetyltransferase (GNAT) family protein

P28\_London\_17\_02\_11\_01822 hypothetical protein

P28\_London\_17\_02\_11\_01823 Chromosome-partitioning ATPase Soj

P28\_London\_17\_02\_11\_01825 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_01842 hypothetical protein

P28\_London\_17\_02\_11\_01843 thiamine biosynthesis protein ThiF

P28\_London\_17\_02\_11\_01844 hypothetical protein

P28\_London\_17\_02\_11\_01845 hypothetical protein

P28\_London\_17\_02\_11\_01846 hypothetical protein

P28\_London\_17\_02\_11\_01847 Prophage CP4-57 regulatory protein (AlpA)

P28\_London\_17\_02\_11\_01855 Major Facilitator Superfamily protein

P28\_London\_17\_02\_11\_01860 HTH-type transcriptional regulator CynR

P28\_London\_17\_02\_11\_01865 HTH-type transcriptional regulator CdhR

P28\_London\_17\_02\_11\_01879 hypothetical protein

P28\_London\_17\_02\_11\_01887 Cytoskeleton protein RodZ

P28\_London\_17\_02\_11\_01915 Cytosol aminopeptidase

P28\_London\_17\_02\_11\_01916 DNA polymerase III subunit chi

P28\_London\_17\_02\_11\_01917 hypothetical protein

P28\_London\_17\_02\_11\_01935 Maltose operon periplasmic protein precursor (MaIM)

P28\_London\_17\_02\_11\_01957 hypothetical protein

P28\_London\_17\_02\_11\_01962 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_01975 Periplasmic beta-glucosidase precursor

P28\_London\_17\_02\_11\_01976 Yop proteins translocation protein L

P28\_London\_17\_02\_11\_01977 Yop proteins translocation protein K

P28\_London\_17\_02\_11\_01986 Chaperone protein YscB

P28\_London\_17\_02\_11\_01987 hypothetical protein

P28\_London\_17\_02\_11\_01989 Exoenzyme S synthesis protein B

P28\_London\_17\_02\_11\_01990 hypothetical protein

P28\_London\_17\_02\_11\_01999 Chaperone protein YscY

P28\_London\_17\_02\_11\_02002 TyeA

P28\_London\_17\_02\_11\_02005 Yop proteins translocation protein O

P28\_London\_17\_02\_11\_02006 Flagellar hook-length control protein FliK

P28\_London\_17\_02\_11\_02022 Putative aminoacrylate hydrolase RutD

P28\_London\_17\_02\_11\_02025 Streptothricin hydrolase

P28\_London\_17\_02\_11\_02046 hypothetical protein

P28\_London\_17\_02\_11\_02052 Porin D precursor

P28\_London\_17\_02\_11\_02058 hypothetical protein

P28\_London\_17\_02\_11\_02067 hypothetical protein

P28\_London\_17\_02\_11\_02069 hypothetical protein

P28\_London\_17\_02\_11\_02076 AMP nucleosidase

P28\_London\_17\_02\_11\_02082 Thiamine-phosphate synthase

P28\_London\_17\_02\_11\_02092 hypothetical protein

P28\_London\_17\_02\_11\_02094 LPS-assembly lipoprotein LptE

P28\_London\_17\_02\_11\_02096 hypothetical protein

P28\_London\_17\_02\_11\_02108 Stage V sporulation protein D

P28\_London\_17\_02\_11\_02113 Tropinesterase

P28\_London\_17\_02\_11\_02114 Leucine carboxyl methyltransferase

P28\_London\_17\_02\_11\_02120 putative enoyl-CoA hydratase 1

P28\_London\_17\_02\_11\_02123 hypothetical protein

P28\_London\_17\_02\_11\_02138 Transcriptional regulatory protein QseB

P28\_London\_17\_02\_11\_02167 tRNA-Leu(gag)

P28\_London\_17\_02\_11\_02193 RNA polymerase-binding transcription factor DksA

P28\_London\_17\_02\_11\_02195 Sugar fermentation stimulation protein A

P28\_London\_17\_02\_11\_02200 Trans-2%2C3-dihydro-3-hydroxyanthranilate isomerase

P28\_London\_17\_02\_11\_02202 Protein of unknown function%2C DUF

P28\_London\_17\_02\_11\_02218 hypothetical protein

P28\_London\_17\_02\_11\_02220 Ribosomal RNA small subunit methyltransferase I

P28\_London\_17\_02\_11\_02245 2-dehydropantoate 2-reductase

P28\_London\_17\_02\_11\_02250 Methylated-DNA--protein-cysteine methyltransferase

P28\_London\_17\_02\_11\_02272 Cytochrome c

P28\_London\_17\_02\_11\_02275 E3 Ubiquitin ligase

P28\_London\_17\_02\_11\_02321 regulatory protein UhpC

P28\_London\_17\_02\_11\_02332 Molybdenum cofactor biosynthesis protein B

P28\_London\_17\_02\_11\_02343 PAAR motif

P28\_London\_17\_02\_11\_02351 Glyoxylate/hydroxypyruvate reductase B

P28\_London\_17\_02\_11\_02357 Glycine betaine/carnitine/choline transport ATP-binding protein OpuCA

P28\_London\_17\_02\_11\_02362 hypothetical protein

P28\_London\_17\_02\_11\_02377 putative nitrate reductase molybdenum cofactor assembly chaperone NarW



P28\_London\_17\_02\_11\_02379 Chaperone SurA precursor

P28\_London\_17\_02\_11\_02385 ATP-dependent RNA helicase RhIB

P28\_London\_17\_02\_11\_02393 Chloramphenicol acetyltransferase

P28\_London\_17\_02\_11\_02394 hypothetical protein

P28\_London\_17\_02\_11\_02475 hypothetical protein

P28\_London\_17\_02\_11\_02476 hypothetical protein

P28\_London\_17\_02\_11\_02477 hypothetical protein

P28\_London\_17\_02\_11\_02478 Tyrosine recombinase XerC

P28\_London\_17\_02\_11\_02479 hypothetical protein

P28\_London\_17\_02\_11\_02480 ribonucleotide-diphosphate reductase subunit alpha

P28\_London\_17\_02\_11\_02481 Glutathione import ATP-binding protein GsiA

P28\_London\_17\_02\_11\_02482 Formamidase

P28\_London\_17\_02\_11\_02483 Heme-binding protein A precursor

P28\_London\_17\_02\_11\_02484 Glutathione transport system permease protein GsiC

P28\_London\_17\_02\_11\_02485 Glutathione transport system permease protein GsiD

P28\_London\_17\_02\_11\_02486 ANTAR domain protein

P28\_London\_17\_02\_11\_02487 Aliphatic amidase expression-regulating protein

P28\_London\_17\_02\_11\_02488 hypothetical protein

P28\_London\_17\_02\_11\_02489 hypothetical protein

P28\_London\_17\_02\_11\_02490 hypothetical protein

P28\_London\_17\_02\_11\_02491 hypothetical protein

P28\_London\_17\_02\_11\_02492 hypothetical protein

P28\_London\_17\_02\_11\_02493 hypothetical protein

P28\_London\_17\_02\_11\_02494 Phage integrase family protein

P28\_London\_17\_02\_11\_02495 hypothetical protein

P28\_London\_17\_02\_11\_02496 hypothetical protein

P28\_London\_17\_02\_11\_02497 Transposase from transposon Tn916

P28\_London\_17\_02\_11\_02498 hypothetical protein

P28\_London\_17\_02\_11\_02499 putative type I restriction enzyme P M protein

P28\_London\_17\_02\_11\_02500 EcoKI restriction-modification system protein HsdS

P28\_London\_17\_02\_11\_02501 Divergent AAA domain protein

P28\_London\_17\_02\_11\_02503 NADPH dehydrogenase

P28\_London\_17\_02\_11\_02510 Transposase IS66 family protein

P28\_London\_17\_02\_11\_02528 tRNA-Arg(ccg)

P28\_London\_17\_02\_11\_02541 Metalloprotease LoiP precursor

P28\_London\_17\_02\_11\_02543 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_02567 3-demethylubiquinone-9 3-methyltransferase

P28\_London\_17\_02\_11\_02572 NADH oxidase

P28\_London\_17\_02\_11\_02575 putative HTH-type transcriptional regulator YybR

P28\_London\_17\_02\_11\_02576 EamA-like transporter family protein

P28\_London\_17\_02\_11\_02581 ATPase family associated with various cellular activities (AAA)

P28\_London\_17\_02\_11\_02582 Putative glutathione-dependent formaldehyde-activating enzyme

P28\_London\_17\_02\_11\_02586 hypothetical protein

P28\_London\_17\_02\_11\_02589 N-substituted formamide deformylase precursor

P28\_London\_17\_02\_11\_02602 Phage-related baseplate assembly protein

P28\_London\_17\_02\_11\_02605 L-threonine dehydratase catabolic TdcB

P28\_London\_17\_02\_11\_02607 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_02615 hypothetical protein

P28\_London\_17\_02\_11\_02625 hypothetical protein

P28\_London\_17\_02\_11\_02634 hypothetical protein

P28\_London\_17\_02\_11\_02646 Transglycosylase

P28\_London\_17\_02\_11\_02656 Chagasin family peptidase inhibitor I42

P28\_London\_17\_02\_11\_02689 Methylmalonate-semialdehyde dehydrogenase [acylating]

P28\_London\_17\_02\_11\_02697 HTH-type transcriptional regulator GbpR

P28\_London\_17\_02\_11\_02708 Rhamnosyltransferase 1 subunit A

P28\_London\_17\_02\_11\_02709 Putative prophage CPS-53 integrase

P28\_London\_17\_02\_11\_02710 LysR substrate binding domain protein

P28\_London\_17\_02\_11\_02711 anaerobic benzoate catabolism transcriptional regulator

P28\_London\_17\_02\_11\_02712 Putative helicase

P28\_London\_17\_02\_11\_02713 hypothetical protein

P28\_London\_17\_02\_11\_02714 hypothetical protein

P28\_London\_17\_02\_11\_02715 hypothetical protein

P28\_London\_17\_02\_11\_02716 hypothetical protein

P28\_London\_17\_02\_11\_02717 hypothetical protein

P28\_London\_17\_02\_11\_02718 hypothetical protein

P28\_London\_17\_02\_11\_02719 TraU protein

P28\_London\_17\_02\_11\_02720 hypothetical protein

P28\_London\_17\_02\_11\_02721 hypothetical protein

P28\_London\_17\_02\_11\_02731 EamA-like transporter family protein

P28\_London\_17\_02\_11\_02745 Electron transport complex protein rnfB

P28\_London\_17\_02\_11\_02746 Electron transport complex protein RnfC

P28\_London\_17\_02\_11\_02749 Electron transport complex protein RnfE

P28\_London\_17\_02\_11\_02751 hypothetical protein

P28\_London\_17\_02\_11\_02752 Release factor glutamine methyltransferase

P28\_London\_17\_02\_11\_02754 3-carboxy-cis-2C-cis-muconate cycloisomerase

P28\_London\_17\_02\_11\_02763 Peptidoglycan-binding protein ArfA

P28\_London\_17\_02\_11\_02794 putative 4-amino-4-deoxy-L-arabinose-phosphoundecaprenol flippase subunit ArnE

P28\_London\_17\_02\_11\_02818 Cys-tRNA(Pro)/Cys-tRNA(Cys) deacylase YbaK

P28\_London\_17\_02\_11\_02820 Glycerol kinase

P28\_London\_17\_02\_11\_02834 Bifunctional transcriptional activator/DNA repair enzyme Ada

P28\_London\_17\_02\_11\_02850 hypothetical protein

P28\_London\_17\_02\_11\_02861 Murein hydrolase activator NlpD precursor

P28\_London\_17\_02\_11\_02876 tRNA(Ile)-lysidine synthase

P28\_London\_17\_02\_11\_02903 Leucine efflux protein

P28\_London\_17\_02\_11\_02906 Cysteine desulfuration protein SufE

P28\_London\_17\_02\_11\_02909 ABC-2 family transporter protein

P28\_London\_17\_02\_11\_02919 hypothetical protein

P28\_London\_17\_02\_11\_02922 hypothetical protein

P28\_London\_17\_02\_11\_02943 CheW-like domain protein

P28\_London\_17\_02\_11\_02958 HTH-type transcriptional repressor ComR

P28\_London\_17\_02\_11\_02963 YaeQ protein

P28\_London\_17\_02\_11\_02964 Phospholipase D precursor

P28\_London\_17\_02\_11\_02984 30S ribosomal protein S16

P28\_London\_17\_02\_11\_02987 Magnesium and cobalt efflux protein CorC

P28\_London\_17\_02\_11\_02998 Glutamine--fructose-6-phosphate aminotransferase [isomerizing]

P28\_London\_17\_02\_11\_03011 Type IV secretion system protein PtlF precursor

P28\_London\_17\_02\_11\_03014 hypothetical protein

P28\_London\_17\_02\_11\_03017 Type IV secretory pathway%2C VirB3-like protein

P28\_London\_17\_02\_11\_03041 Gamma-glutamylputrescine oxidoreductase

P28\_London\_17\_02\_11\_03047 tRNA-Ser(act)

P28\_London\_17\_02\_11\_03053 hypothetical protein

P28\_London\_17\_02\_11\_03054 Biofilm dispersion protein BdlA

P28\_London\_17\_02\_11\_03068 Ribose operon repressor

P28\_London\_17\_02\_11\_03074 hypothetical protein

P28\_London\_17\_02\_11\_03076 Bifunctional NAD biosynthesis protein NadR

P28\_London\_17\_02\_11\_03079 RNA chaperone/anti-terminator

P28\_London\_17\_02\_11\_03084 hypothetical protein

P28\_London\_17\_02\_11\_03085 5-carboxymethyl-2-hydroxymuconate Delta-isomerase

P28\_London\_17\_02\_11\_03092 Protease 3 precursor

P28\_London\_17\_02\_11\_03094 FIST N domain protein

P28\_London\_17\_02\_11\_03100 Transcriptional activator protein ExaE

P28\_London\_17\_02\_11\_03106 Putative SOS response-associated peptidase YedK

P28\_London\_17\_02\_11\_03111 hypothetical protein

P28\_London\_17\_02\_11\_03143 4-diphosphocytidyl-2-C-methyl-D-erythritol kinase

P28\_London\_17\_02\_11\_03144 tRNA-Gln(ttg)

P28\_London\_17\_02\_11\_03146 Peptidyl-tRNA hydrolase

P28\_London\_17\_02\_11\_03178 DNA-invertase hin

P28\_London\_17\_02\_11\_03183 Superoxide dismutase [Fe]

P28\_London\_17\_02\_11\_03185 Mercuric reductase

P28\_London\_17\_02\_11\_03191 tRNA-Met(cat)

P28\_London\_17\_02\_11\_03192 Tyrosine recombinase XerC

P28\_London\_17\_02\_11\_03193 hypothetical protein

P28\_London\_17\_02\_11\_03194 hypothetical protein

P28\_London\_17\_02\_11\_03195 Zona occludens toxin

P28\_London\_17\_02\_11\_03196 hypothetical protein

P28\_London\_17\_02\_11\_03210 Cadmium%2C cobalt and zinc/H(+)-K(+) antiporter

P28\_London\_17\_02\_11\_03213 putative RNA polymerase sigma factor Fecl

P28\_London\_17\_02\_11\_03224 Phosphonoacetaldehyde hydrolase

P28\_London\_17\_02\_11\_03241 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_03250 Glutaminase-asparaginase precursor

P28\_London\_17\_02\_11\_03261 hypothetical protein

P28\_London\_17\_02\_11\_03264 RNA polymerase sigma factor

P28\_London\_17\_02\_11\_03269 hypothetical protein

P28\_London\_17\_02\_11\_03273 Threonine/homoserine exporter RhtA

P28\_London\_17\_02\_11\_03275 hypothetical protein

P28\_London\_17\_02\_11\_03276 RNA polymerase sigma factor

P28\_London\_17\_02\_11\_03284 Putative addiction module component

P28\_London\_17\_02\_11\_03288 Phage-related baseplate assembly protein

P28\_London\_17\_02\_11\_03289 hypothetical protein

P28\_London\_17\_02\_11\_03290 hypothetical protein

P28\_London\_17\_02\_11\_03306 hypothetical protein

P28\_London\_17\_02\_11\_03309 hypothetical protein

P28\_London\_17\_02\_11\_03320 tRNA-Val(tac)

P28\_London\_17\_02\_11\_03327 hypothetical protein

P28\_London\_17\_02\_11\_03340 Ribosomal large subunit pseudouridine synthase A

P28\_London\_17\_02\_11\_03344 Lipid A biosynthesis lauroyl acyltransferase

P28\_London\_17\_02\_11\_03356 hypothetical protein

P28\_London\_17\_02\_11\_03357 TraM recognition site of TraD and TraG

P28\_London\_17\_02\_11\_03358 hypothetical protein

P28\_London\_17\_02\_11\_03359 DNA replication and repair protein RecF

P28\_London\_17\_02\_11\_03360 hypothetical protein

P28\_London\_17\_02\_11\_03361 Nucleotidyltransferase domain protein

P28\_London\_17\_02\_11\_03362 hypothetical protein

P28\_London\_17\_02\_11\_03363 hypothetical protein

P28\_London\_17\_02\_11\_03364 ATP-dependent zinc metalloprotease FtsH

P28\_London\_17\_02\_11\_03365 hypothetical protein

P28\_London\_17\_02\_11\_03366 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_03367 Plasmid protein of unknown function (Plasmid\_RAQPRD)

P28\_London\_17\_02\_11\_03368 hypothetical protein

P28\_London\_17\_02\_11\_03369 hypothetical protein

P28\_London\_17\_02\_11\_03370 hypothetical protein

P28\_London\_17\_02\_11\_03371 hypothetical protein

P28\_London\_17\_02\_11\_03372 hypothetical protein

P28\_London\_17\_02\_11\_03373 hypothetical protein

P28\_London\_17\_02\_11\_03374 hypothetical protein

P28\_London\_17\_02\_11\_03375 F pilus assembly Type-IV secretion system for plasmid transfer

P28\_London\_17\_02\_11\_03376 DSBA-like thioredoxin domain protein

P28\_London\_17\_02\_11\_03377 hypothetical protein

P28\_London\_17\_02\_11\_03378 hypothetical protein

P28\_London\_17\_02\_11\_03379 TraU protein

P28\_London\_17\_02\_11\_03380 hypothetical protein

P28\_London\_17\_02\_11\_03381 hypothetical protein

P28\_London\_17\_02\_11\_03382 hypothetical protein

P28\_London\_17\_02\_11\_03383 hypothetical protein

P28\_London\_17\_02\_11\_03384 RES domain protein

P28\_London\_17\_02\_11\_03385 hypothetical protein

P28\_London\_17\_02\_11\_03386 Putative helicase

P28\_London\_17\_02\_11\_03387 Transposase

P28\_London\_17\_02\_11\_03388 hypothetical protein

P28\_London\_17\_02\_11\_03389 Redox-sensitive transcriptional activator SoxR

P28\_London\_17\_02\_11\_03390 Mercuric resistance operon regulatory protein

P28\_London\_17\_02\_11\_03391 hypothetical protein

P28\_London\_17\_02\_11\_03392 hypothetical protein

P28\_London\_17\_02\_11\_03393 Isoprenylcysteine carboxyl methyltransferase (ICMT) family protein

P28\_London\_17\_02\_11\_03394 hypothetical protein

P28\_London\_17\_02\_11\_03395 Polyphosphate kinase 2 (PPK2)

P28\_London\_17\_02\_11\_03396 Copper-exporting P-type ATPase A

P28\_London\_17\_02\_11\_03397 Tetracycline resistance protein%2C class B

P28\_London\_17\_02\_11\_03398 LemA family protein

P28\_London\_17\_02\_11\_03399 hypothetical protein

P28\_London\_17\_02\_11\_03400 hypothetical protein

P28\_London\_17\_02\_11\_03401 Ribonuclease

P28\_London\_17\_02\_11\_03402 Pyrimidine-nucleoside phosphorylase

P28\_London\_17\_02\_11\_03403 Ribose-phosphate pyrophosphokinase

P28\_London\_17\_02\_11\_03404 hypothetical protein

P28\_London\_17\_02\_11\_03405 hypothetical protein

P28\_London\_17\_02\_11\_03406 D-lactate dehydrogenase

P28\_London\_17\_02\_11\_03407 putative protein kinase UbiB

P28\_London\_17\_02\_11\_03408 glyceraldehyde-3-phosphate dehydrogenase

P28\_London\_17\_02\_11\_03409 MgtC family protein

P28\_London\_17\_02\_11\_03410 NADP-dependent 3-hydroxy acid dehydrogenase YdfG

P28\_London\_17\_02\_11\_03411 HTH-type transcriptional regulator MtrR

P28\_London\_17\_02\_11\_03412 Xylulose-5-phosphate/fructose-6-phosphate phosphoketolase

P28\_London\_17\_02\_11\_03413 Cyclopropane-fatty-acyl-phospholipid synthase

P28\_London\_17\_02\_11\_03414 HTH-type transcriptional regulator ZntR

P28\_London\_17\_02\_11\_03415 Acetate kinase

P28\_London\_17\_02\_11\_03416 Alpha/beta hydrolase family protein

P28\_London\_17\_02\_11\_03417 Mercuric transport protein periplasmic component precursor

P28\_London\_17\_02\_11\_03418 hypothetical protein

P28\_London\_17\_02\_11\_03419 Sensor kinase CusS

P28\_London\_17\_02\_11\_03420 Transcriptional regulatory protein CusR

P28\_London\_17\_02\_11\_03421 Copper resistance protein A precursor

P28\_London\_17\_02\_11\_03422 Copper resistance protein B precursor

P28\_London\_17\_02\_11\_03423 Protein of unknown function%2C DUF

P28\_London\_17\_02\_11\_03424 hypothetical protein

P28\_London\_17\_02\_11\_03425 Silver exporting P-type ATPase



P28\_London\_17\_02\_11\_03426 Copper resistance protein C precursor

P28\_London\_17\_02\_11\_03427 Copper resistance protein D

P28\_London\_17\_02\_11\_03428 Copper resistance protein K precursor

P28\_London\_17\_02\_11\_03429 Transglycosylase SLT domain protein

P28\_London\_17\_02\_11\_03430 hypothetical protein

P28\_London\_17\_02\_11\_03431 hypothetical protein

P28\_London\_17\_02\_11\_03432 hypothetical protein

P28\_London\_17\_02\_11\_03433 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_03434 Protein ArsC

P28\_London\_17\_02\_11\_03435 Sodium Bile acid symporter family protein

P28\_London\_17\_02\_11\_03436 Arsenate reductase

P28\_London\_17\_02\_11\_03437 NADPH azoreductase

P28\_London\_17\_02\_11\_03438 hypothetical protein

P28\_London\_17\_02\_11\_03439 hypothetical protein

P28\_London\_17\_02\_11\_03440 hypothetical protein

P28\_London\_17\_02\_11\_03441 hypothetical protein

P28\_London\_17\_02\_11\_03442 hypothetical protein

P28\_London\_17\_02\_11\_03443 hypothetical protein

P28\_London\_17\_02\_11\_03444 hypothetical protein

P28\_London\_17\_02\_11\_03445 hypothetical protein

P28\_London\_17\_02\_11\_03446 hypothetical protein

P28\_London\_17\_02\_11\_03447 hypothetical protein

P28\_London\_17\_02\_11\_03448 hypothetical protein

P28\_London\_17\_02\_11\_03449 hypothetical protein

P28\_London\_17\_02\_11\_03450 hypothetical protein

P28\_London\_17\_02\_11\_03451 hypothetical protein

P28\_London\_17\_02\_11\_03452 hypothetical protein

P28\_London\_17\_02\_11\_03453 hypothetical protein

P28\_London\_17\_02\_11\_03454 Lipoprotein signal peptidase

P28\_London\_17\_02\_11\_03455 putative cadmium-transporting ATPase

P28\_London\_17\_02\_11\_03456 HTH-type transcriptional regulator ZntR

P28\_London\_17\_02\_11\_03457 Cation efflux family protein

P28\_London\_17\_02\_11\_03458 DNA topoisomerase 3

P28\_London\_17\_02\_11\_03459 Single-stranded DNA-binding protein

P28\_London\_17\_02\_11\_03460 hypothetical protein

P28\_London\_17\_02\_11\_03461 hypothetical protein

P28\_London\_17\_02\_11\_03462 hypothetical protein

P28\_London\_17\_02\_11\_03463 hypothetical protein

P28\_London\_17\_02\_11\_03464 hypothetical protein

P28\_London\_17\_02\_11\_03465 hypothetical protein

P28\_London\_17\_02\_11\_03466 Sporulation initiation inhibitor protein Soj

P28\_London\_17\_02\_11\_03467 Prophage CP4-57 regulatory protein (AlpA)

P28\_London\_17\_02\_11\_03468 hypothetical protein

P28\_London\_17\_02\_11\_03469 tRNA-Gly(gcc)

P28\_London\_17\_02\_11\_03470 Putative cyclic-di-GMP phosphodiesterase AdrB

P28\_London\_17\_02\_11\_03471 hypothetical protein

P28\_London\_17\_02\_11\_03472 hypothetical protein

P28\_London\_17\_02\_11\_03477 Inner membrane transport permease YadH

P28\_London\_17\_02\_11\_03495 Tetracycline resistance protein%2C class B

P28\_London\_17\_02\_11\_03509 hypothetical protein

P28\_London\_17\_02\_11\_03510 hypothetical protein

P28\_London\_17\_02\_11\_03511 hypothetical protein

P28\_London\_17\_02\_11\_03512 hypothetical protein

P28\_London\_17\_02\_11\_03513 hypothetical protein

P28\_London\_17\_02\_11\_03514 CDP-Glycerol:Poly(glycerophosphate) glycerophosphotransferase

P28\_London\_17\_02\_11\_03557 Pyridoxine/pyridoxamine 5'-phosphate oxidase

P28\_London\_17\_02\_11\_03562 Copper resistance protein D

P28\_London\_17\_02\_11\_03563 hypothetical protein

P28\_London\_17\_02\_11\_03581 Double zinc ribbon

P28\_London\_17\_02\_11\_03587 hypothetical protein

P28\_London\_17\_02\_11\_03590 tRNA-Val(gac)

P28\_London\_17\_02\_11\_03591 hypothetical protein

P28\_London\_17\_02\_11\_03592 hypothetical protein

P28\_London\_17\_02\_11\_03615 hypothetical protein

P28\_London\_17\_02\_11\_03621 Inner membrane protein YqaA

P28\_London\_17\_02\_11\_03625 hypothetical protein

P28\_London\_17\_02\_11\_03626 hypothetical protein

P28\_London\_17\_02\_11\_03633 hypothetical protein

P28\_London\_17\_02\_11\_03643 MerR family regulatory protein

P28\_London\_17\_02\_11\_03644 tRNA-Pro(ggg)

P28\_London\_17\_02\_11\_03646 DNA helicase II

P28\_London\_17\_02\_11\_03647 hypothetical protein

P28\_London\_17\_02\_11\_03648 MarR family protein

P28\_London\_17\_02\_11\_03649 hypothetical protein

P28\_London\_17\_02\_11\_03650 hypothetical protein

P28\_London\_17\_02\_11\_03651 hypothetical protein

P28\_London\_17\_02\_11\_03652 hypothetical protein

P28\_London\_17\_02\_11\_03653 DNA-binding transcriptional repressor PuvR

P28\_London\_17\_02\_11\_03654 hypothetical protein

P28\_London\_17\_02\_11\_03655 YqaJ-like viral recombinase domain protein

P28\_London\_17\_02\_11\_03656 hypothetical protein

P28\_London\_17\_02\_11\_03657 hypothetical protein

P28\_London\_17\_02\_11\_03658 hypothetical protein

P28\_London\_17\_02\_11\_03659 Helix-turn-helix

P28\_London\_17\_02\_11\_03660 hypothetical protein

P28\_London\_17\_02\_11\_03661 Antitoxin YafN

P28\_London\_17\_02\_11\_03662 mRNA interferase RelE

P28\_London\_17\_02\_11\_03663 hypothetical protein

P28\_London\_17\_02\_11\_03664 Plasmid pRiA4b ORF-3-like protein

P28\_London\_17\_02\_11\_03665 hypothetical protein

P28\_London\_17\_02\_11\_03666 DNA recombination protein RmuC

P28\_London\_17\_02\_11\_03667 hypothetical protein

P28\_London\_17\_02\_11\_03668 hypothetical protein

P28\_London\_17\_02\_11\_03669 hypothetical protein

P28\_London\_17\_02\_11\_03670 hypothetical protein

P28\_London\_17\_02\_11\_03671 hypothetical protein

P28\_London\_17\_02\_11\_03672 6-N-hydroxylaminopurine resistance protein

P28\_London\_17\_02\_11\_03673 hypothetical protein

P28\_London\_17\_02\_11\_03674 UDP-glucose:undecaprenyl-phosphate glucose-1-phosphate transferase

P28\_London\_17\_02\_11\_03675 Alginate biosynthesis protein AlgA

P28\_London\_17\_02\_11\_03676 Glycosyl transferase family 2

P28\_London\_17\_02\_11\_03677 Polysaccharide biosynthesis/export protein

P28\_London\_17\_02\_11\_03678 Tyrosine-protein kinase ptk

P28\_London\_17\_02\_11\_03679 D-inositol-3-phosphate glycosyltransferase

P28\_London\_17\_02\_11\_03680 hypothetical protein

P28\_London\_17\_02\_11\_03681 D-inositol-3-phosphate glycosyltransferase

P28\_London\_17\_02\_11\_03682 Glycogen synthase

P28\_London\_17\_02\_11\_03683 hypothetical protein

P28\_London\_17\_02\_11\_03684 putative peptidoglycan biosynthesis protein MurJ

P28\_London\_17\_02\_11\_03685 Acyltransferase family protein

P28\_London\_17\_02\_11\_03686 3-oxosteroid 1-dehydrogenase

P28\_London\_17\_02\_11\_03687 Eukaryotic DNA topoisomerase I%2C catalytic core

P28\_London\_17\_02\_11\_03688 hypothetical protein

P28\_London\_17\_02\_11\_03689 Leucine-responsive regulatory protein

P28\_London\_17\_02\_11\_03690 hypothetical protein

P28\_London\_17\_02\_11\_03691 2-oxoisovalerate dehydrogenase subunit alpha

P28\_London\_17\_02\_11\_03692 2-oxoisovalerate dehydrogenase subunit beta

P28\_London\_17\_02\_11\_03693 Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex

P28\_London\_17\_02\_11\_03694 Dihydrolipoyl dehydrogenase

P28\_London\_17\_02\_11\_03707 Glyoxylate/hydroxypyruvate reductase B

P28\_London\_17\_02\_11\_03728 hypothetical protein

P28\_London\_17\_02\_11\_03731 hypothetical protein

P28\_London\_17\_02\_11\_03735 ATPase family associated with various cellular activities (AAA)

P28\_London\_17\_02\_11\_03736 Mu DNA-binding domain protein

P28\_London\_17\_02\_11\_03737 ORF6C domain protein

P28\_London\_17\_02\_11\_03781 hypothetical protein

P28\_London\_17\_02\_11\_03784 Molecular chaperone Hsp31 and glyoxalase 3

P28\_London\_17\_02\_11\_03790 HTH-type transcriptional regulator YofA

P28\_London\_17\_02\_11\_03792 haloacid dehalogenase-like hydrolase

P28\_London\_17\_02\_11\_03800 Glycine cleavage system transcriptional activator

P28\_London\_17\_02\_11\_03820 Methionyl-tRNA formyltransferase

P28\_London\_17\_02\_11\_03860 Transposon Tn7 transposition protein TnsA

P28\_London\_17\_02\_11\_03861 Transposon Tn7 transposition protein TnsB

P28\_London\_17\_02\_11\_03862 Transposon Tn7 transposition protein TnsC

P28\_London\_17\_02\_11\_03863 hypothetical protein

P28\_London\_17\_02\_11\_03864 Transposon Tn7 transposition protein TnsE

P28\_London\_17\_02\_11\_03865 Transposase

P28\_London\_17\_02\_11\_03866 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_03867 Spore protein SP21

P28\_London\_17\_02\_11\_03868 ATP-dependent Clp protease ATP-binding subunit ClpC

P28\_London\_17\_02\_11\_03869 Major cardiolipin synthase ClsA

P28\_London\_17\_02\_11\_03870 ATP-dependent zinc metalloprotease FtsH 4

P28\_London\_17\_02\_11\_03871 Spore protein SP21

P28\_London\_17\_02\_11\_03872 YfdX protein

P28\_London\_17\_02\_11\_03873 YfdX protein

P28\_London\_17\_02\_11\_03874 hypothetical protein

P28\_London\_17\_02\_11\_03875 hypothetical protein

P28\_London\_17\_02\_11\_03876 Thioredoxin-2

P28\_London\_17\_02\_11\_03877 Glutathione-regulated potassium-efflux system protein KefC

P28\_London\_17\_02\_11\_03878 Response regulator PleD

P28\_London\_17\_02\_11\_03879 Phosphate-starvation-inducible E

P28\_London\_17\_02\_11\_03880 hypothetical protein

P28\_London\_17\_02\_11\_03881 Putative serine protease HhoB precursor

P28\_London\_17\_02\_11\_03882 Transposase DDE domain protein

P28\_London\_17\_02\_11\_03883 hypothetical protein

P28\_London\_17\_02\_11\_03884 hypothetical protein

P28\_London\_17\_02\_11\_03913 hypothetical protein

P28\_London\_17\_02\_11\_03936 tRNA-Arg(acg)

P28\_London\_17\_02\_11\_03941 RNA polymerase-binding transcription factor DksA

P28\_London\_17\_02\_11\_03962 Fimbrial protein precursor

P28\_London\_17\_02\_11\_03976 Laccase domain protein YfiH

P28\_London\_17\_02\_11\_03978 tRNA-Asn(gtt)

P28\_London\_17\_02\_11\_03979 tRNA-Pro(tgg)

P28\_London\_17\_02\_11\_03980 tRNA-Lys(ttt)

P28\_London\_17\_02\_11\_03981 Tyrosine recombinase XerC

P28\_London\_17\_02\_11\_03983 Transposase%2C Mutator family

P28\_London\_17\_02\_11\_03985 hypothetical protein

P28\_London\_17\_02\_11\_03986 Toxin ParE1

P28\_London\_17\_02\_11\_03987 Putative nickel-responsive regulator

P28\_London\_17\_02\_11\_03988 hypothetical protein

P28\_London\_17\_02\_11\_03989 hypothetical protein

P28\_London\_17\_02\_11\_03990 hypothetical protein

P28\_London\_17\_02\_11\_03992 TraU protein

P28\_London\_17\_02\_11\_03995 hypothetical protein

P28\_London\_17\_02\_11\_03997 hypothetical protein

P28\_London\_17\_02\_11\_04002 hypothetical protein

P28\_London\_17\_02\_11\_04003 hypothetical protein

P28\_London\_17\_02\_11\_04004 hypothetical protein

P28\_London\_17\_02\_11\_04006 Plasmid protein of unknown function (Plasmid\_RAQPRD)

P28\_London\_17\_02\_11\_04008 hypothetical protein

P28\_London\_17\_02\_11\_04016 hypothetical protein

P28\_London\_17\_02\_11\_04017 Alpha-lytic protease precursor

P28\_London\_17\_02\_11\_04018 hypothetical protein

P28\_London\_17\_02\_11\_04019 hypothetical protein

P28\_London\_17\_02\_11\_04020 hypothetical protein

P28\_London\_17\_02\_11\_04021 hypothetical protein

P28\_London\_17\_02\_11\_04022 hypothetical protein

P28\_London\_17\_02\_11\_04023 hypothetical protein

P28\_London\_17\_02\_11\_04024 hypothetical protein

P28\_London\_17\_02\_11\_04026 hypothetical protein

P28\_London\_17\_02\_11\_04027 hypothetical protein

P28\_London\_17\_02\_11\_04028 hypothetical protein

P28\_London\_17\_02\_11\_04029 hypothetical protein

P28\_London\_17\_02\_11\_04030 hypothetical protein

P28\_London\_17\_02\_11\_04031 hypothetical protein

P28\_London\_17\_02\_11\_04032 hypothetical protein

P28\_London\_17\_02\_11\_04033 putative transposase

P28\_London\_17\_02\_11\_04037 hypothetical protein

P28\_London\_17\_02\_11\_04040 Type IV pilus biogenesis

P28\_London\_17\_02\_11\_04044 RNA polymerase-associated protein RapA

P28\_London\_17\_02\_11\_04045 hypothetical protein

P28\_London\_17\_02\_11\_04046 hypothetical protein

P28\_London\_17\_02\_11\_04047 DNA topoisomerase 1

P28\_London\_17\_02\_11\_04048 Single-stranded DNA-binding protein

P28\_London\_17\_02\_11\_04049 Phage regulatory protein Rha (Phage\_pRha)

P28\_London\_17\_02\_11\_04055 tRNA-Tyr(gta)

P28\_London\_17\_02\_11\_04056 tRNA-Gly(tcc)

P28\_London\_17\_02\_11\_04057 tRNA-Thr(ggt)

P28\_London\_17\_02\_11\_04058 Elongation factor Tu

P28\_London\_17\_02\_11\_04059 tRNA-Trp(cca)

P28\_London\_17\_02\_11\_04107 Linear gramicidin dehydrogenase LgrE

P28\_London\_17\_02\_11\_04115 Fe(3+)-pyochelin receptor precursor

P28\_London\_17\_02\_11\_04116 hypothetical protein

P28\_London\_17\_02\_11\_04117 hypothetical protein

P28\_London\_17\_02\_11\_04132 UDP-2%2C3-diacetamido-2%2C3-dideoxy-D-glucuronate 2-epimerase

P28\_London\_17\_02\_11\_04138 hypothetical protein



P28\_London\_17\_02\_11\_04139 Polysaccharide biosynthesis protein

P28\_London\_17\_02\_11\_04140 hypothetical protein

P28\_London\_17\_02\_11\_04143 1%2C5-anhydro-D-fructose reductase

P28\_London\_17\_02\_11\_04145 Putative acetyltransferase EpsM

P28\_London\_17\_02\_11\_04147 GDP/UDP-N%2CN'-diacetylbacillosamine 2-epimerase (hydrolyzing)

P28\_London\_17\_02\_11\_04148 Putative pyridoxal phosphate-dependent aminotransferase EpsN

P28\_London\_17\_02\_11\_04157 Phosphoserine aminotransferase

P28\_London\_17\_02\_11\_04159 Methylthioribose-1-phosphate isomerase

P28\_London\_17\_02\_11\_04160 5-methylthioadenosine/S-adenosylhomocysteine deaminase

P28\_London\_17\_02\_11\_04169 Ribosomal large subunit pseudouridine synthase B

P28\_London\_17\_02\_11\_04199 2-hydroxychromene-2-carboxylate isomerase

P28\_London\_17\_02\_11\_04236 hypothetical protein

P28\_London\_17\_02\_11\_04243 2-(5''-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase

P28\_London\_17\_02\_11\_04249 Malonate transporter MadL subunit

P28\_London\_17\_02\_11\_04258 Decarboxylase NovR

P28\_London\_17\_02\_11\_04272 Inosose isomerase

P28\_London\_17\_02\_11\_04295 hypothetical protein

P28\_London\_17\_02\_11\_04297 Tn3 transposase DDE domain protein

P28\_London\_17\_02\_11\_04298 EamA-like transporter family protein

P28\_London\_17\_02\_11\_04299 hypothetical protein

P28\_London\_17\_02\_11\_04300 Homospermidine synthase

P28\_London\_17\_02\_11\_04301 hypothetical protein

P28\_London\_17\_02\_11\_04302 Phage protein Gp37/Gp68

P28\_London\_17\_02\_11\_04303 Tyrosine recombinase XerC

P28\_London\_17\_02\_11\_04304 tRNA-Ser(gct)

P28\_London\_17\_02\_11\_04305 hypothetical protein

P28\_London\_17\_02\_11\_04306 6-N-hydroxylaminopurine resistance protein

P28\_London\_17\_02\_11\_04307 6-aminohexanoate-dimer hydrolase

P28\_London\_17\_02\_11\_04308 HTH-type transcriptional regulator VirS

P28\_London\_17\_02\_11\_04309 hypothetical protein

P28\_London\_17\_02\_11\_04310 hypothetical protein

P28\_London\_17\_02\_11\_04311 hypothetical protein

P28\_London\_17\_02\_11\_04312 hypothetical protein

P28\_London\_17\_02\_11\_04313 hypothetical protein

P28\_London\_17\_02\_11\_04314 hypothetical protein

P28\_London\_17\_02\_11\_04315 hypothetical protein

P28\_London\_17\_02\_11\_04316 hypothetical protein

P28\_London\_17\_02\_11\_04317 hypothetical protein

P28\_London\_17\_02\_11\_04323 Ycf48-like protein precursor

P28\_London\_17\_02\_11\_04326 hypothetical protein

P28\_London\_17\_02\_11\_04328 Gamma-glutamylputrescine oxidoreductase

P28\_London\_17\_02\_11\_04343 Acyl-CoA dehydrogenase

P28\_London\_17\_02\_11\_04377 Inner membrane ABC transporter permease protein YdcV

P28\_London\_17\_02\_11\_04386 hypothetical protein

P28\_London\_17\_02\_11\_04399 GTPase of unknown function

P28\_London\_17\_02\_11\_04411 hypothetical protein

P28\_London\_17\_02\_11\_04421 hypothetical protein

P28\_London\_17\_02\_11\_04456 Macrolide export protein MacA

P28\_London\_17\_02\_11\_04462 Glycine cleavage system transcriptional activator

P28\_London\_17\_02\_11\_04478 Gene 25-like lysozyme

P28\_London\_17\_02\_11\_04479 hypothetical protein

P28\_London\_17\_02\_11\_04496 (S)-2-haloacid dehalogenase 4A

P28\_London\_17\_02\_11\_04500 Endoribonuclease L-PSP

P28\_London\_17\_02\_11\_04501 HTH-type transcriptional regulator YjiE

P28\_London\_17\_02\_11\_04502 HTH-type transcriptional regulator YofA

P28\_London\_17\_02\_11\_04508 VRR-NUC domain protein

P28\_London\_17\_02\_11\_04509 PAAR motif

P28\_London\_17\_02\_11\_04516 hypothetical protein

P28\_London\_17\_02\_11\_04522 XdhC and CoxI family protein

P28\_London\_17\_02\_11\_04537 Bacterial extracellular solute-binding proteins%2C family 3

P28\_London\_17\_02\_11\_04538 DNA polymerase III subunit tau

P28\_London\_17\_02\_11\_04549 Adenine phosphoribosyltransferase

P28\_London\_17\_02\_11\_04565 Thiol peroxidase

P28\_London\_17\_02\_11\_04608 Tyrosine recombinase XerC

P28\_London\_17\_02\_11\_04609 hypothetical protein

P28\_London\_17\_02\_11\_04610 hypothetical protein

P28\_London\_17\_02\_11\_04612 enterobactin exporter EntS

P28\_London\_17\_02\_11\_04614 hypothetical protein

P28\_London\_17\_02\_11\_04617 hypothetical protein

P28\_London\_17\_02\_11\_04619 anaerobic benzoate catabolism transcriptional regulator

P28\_London\_17\_02\_11\_04620 hypothetical protein

P28\_London\_17\_02\_11\_04621 hypothetical protein

P28\_London\_17\_02\_11\_04622 Helix-turn-helix domain protein

P28\_London\_17\_02\_11\_04626 hypothetical protein

P28\_London\_17\_02\_11\_04627 Peptidase S26

P28\_London\_17\_02\_11\_04629 Protease HtpX

P28\_London\_17\_02\_11\_04630 Cobalt-zinc-cadmium resistance protein CzcC precursor

P28\_London\_17\_02\_11\_04633 hypothetical protein

P28\_London\_17\_02\_11\_04634 hypothetical protein

P28\_London\_17\_02\_11\_04635 hypothetical protein

P28\_London\_17\_02\_11\_04636 HTH-type transcriptional regulator BenM

P28\_London\_17\_02\_11\_04637 hypothetical protein

P28\_London\_17\_02\_11\_04638 Conjugal transfer protein TraG

P28\_London\_17\_02\_11\_04639 Ribbon-helix-helix protein%2C copG family

P28\_London\_17\_02\_11\_04640 Type IV secretion system protein VirB11

P28\_London\_17\_02\_11\_04643 Type IV secretion system protein virB4

P28\_London\_17\_02\_11\_04644 hypothetical protein

P28\_London\_17\_02\_11\_04645 hypothetical protein

P28\_London\_17\_02\_11\_04646 TrbL/VirB6 plasmid conjugal transfer protein

P28\_London\_17\_02\_11\_04649 Type IV secretion system protein PtIG

P28\_London\_17\_02\_11\_04650 hypothetical protein

P28\_London\_17\_02\_11\_04656 EamA-like transporter family protein

P28\_London\_17\_02\_11\_04662 tRNA-Cys(gca)

P28\_London\_17\_02\_11\_04663 ProP effector

P28\_London\_17\_02\_11\_04669 HTH-type transcriptional activator RhaS

P28\_London\_17\_02\_11\_04670 putative MFS-type transporter YhjX

P28\_London\_17\_02\_11\_04674 hypothetical protein

P28\_London\_17\_02\_11\_04675 Putative aliphatic sulfonates-binding protein precursor

P28\_London\_17\_02\_11\_04678 Putative acyl-CoA dehydrogenase YdbM

P28\_London\_17\_02\_11\_04685 tRNA-Ser(tga)

P28\_London\_17\_02\_11\_04698 Glucosaminiate ammonia-lyase

P28\_London\_17\_02\_11\_04704 Cold shock-like protein CspD

P28\_London\_17\_02\_11\_04705 Isocitrate dehydrogenase [NADP]

P28\_London\_17\_02\_11\_04711 Adenylosuccinate lyase

P28\_London\_17\_02\_11\_04723 NADH-quinone oxidoreductase subunit F

P28\_London\_17\_02\_11\_04731 NADH-quinone oxidoreductase subunit N

P28\_London\_17\_02\_11\_04733 hypothetical protein

P28\_London\_17\_02\_11\_04734 MgtC family protein

P28\_London\_17\_02\_11\_04735 hypothetical protein

P28\_London\_17\_02\_11\_04740 anaerobic benzoate catabolism transcriptional regulator

P28\_London\_17\_02\_11\_04745 hypothetical protein

P28\_London\_17\_02\_11\_04750 DSBA-like thioredoxin domain protein

P28\_London\_17\_02\_11\_04753 hypothetical protein

P28\_London\_17\_02\_11\_04791 hypothetical protein

P28\_London\_17\_02\_11\_04794 Sensor protein PfeS

P28\_London\_17\_02\_11\_04797 Flagellin N-methylase

P28\_London\_17\_02\_11\_04802 hypothetical protein

P28\_London\_17\_02\_11\_04811 FMN-dependent NADH-azoreductase

P28\_London\_17\_02\_11\_04857 NADH pyrophosphatase

P28\_London\_17\_02\_11\_04869 Anthranilate synthase component 2%2C pyocyanine specific

P28\_London\_17\_02\_11\_04870 putative DNA-binding transcriptional regulator

P28\_London\_17\_02\_11\_04876 Glycine cleavage system transcriptional repressor

P28\_London\_17\_02\_11\_04878 Outer membrane protein assembly factor BamC

P28\_London\_17\_02\_11\_04881 tRNA-Ser(cga)

P28\_London\_17\_02\_11\_04889 hypothetical protein

P28\_London\_17\_02\_11\_04907 Signal recognition particle receptor FtsY

P28\_London\_17\_02\_11\_04930 phosphodiesterase

P28\_London\_17\_02\_11\_04936 DNA-binding transcriptional repressor AcrR

P28\_London\_17\_02\_11\_04938 KHG/KDPG aldolase

P28\_London\_17\_02\_11\_04939 acyl-CoA thioesterase YbgC

P28\_London\_17\_02\_11\_04952 Aspartate-semialdehyde dehydrogenase

P28\_London\_17\_02\_11\_04970 Putative type II secretion system protein I precursor

P28\_London\_17\_02\_11\_04971 Type II secretion system protein J precursor

P28\_London\_17\_02\_11\_04977 Aminomethyltransferase

P28\_London\_17\_02\_11\_04978 hypothetical protein

P28\_London\_17\_02\_11\_04982 Modulator of FtsH protease HflK

P28\_London\_17\_02\_11\_04993 hypothetical protein

P28\_London\_17\_02\_11\_04998 hypothetical protein

P28\_London\_17\_02\_11\_05006 hypothetical protein

P28\_London\_17\_02\_11\_05014 hypothetical protein

P28\_London\_17\_02\_11\_05018 Virulence factors putative positive transcription regulator BvgA

P28\_London\_17\_02\_11\_05022 Acetyltransferase (GNAT) family protein

P28\_London\_17\_02\_11\_05034 Paraquat-inducible protein A

P28\_London\_17\_02\_11\_05036 Fumarylacetoacetate (FAA) hydrolase family protein

P28\_London\_17\_02\_11\_05041 Amidohydrolase

P28\_London\_17\_02\_11\_05053 2-hydroxy-3-oxopropionate reductase

P28\_London\_17\_02\_11\_05054 Putative monooxygenase

P28\_London\_17\_02\_11\_05056 HTH-type transcriptional repressor NemR

P28\_London\_17\_02\_11\_05057 Hydrogen cyanide synthase subunit HcnC precursor

P28\_London\_17\_02\_11\_05058 Hydrogen cyanide synthase subunit HcnB

P28\_London\_17\_02\_11\_05059 Hydrogen cyanide synthase subunit HcnA

P28\_London\_17\_02\_11\_05060 Oligo-1%2C6-glucosidase

P28\_London\_17\_02\_11\_05061 Hypoxic response protein 1

P28\_London\_17\_02\_11\_05062 Calmodulin-sensitive adenylate cyclase precursor

P28\_London\_17\_02\_11\_05063 Glucose starvation-inducible protein B

P28\_London\_17\_02\_11\_05064 ATP-dependent Clp protease proteolytic subunit

P28\_London\_17\_02\_11\_05065 Glutathione-independent formaldehyde dehydrogenase

P28\_London\_17\_02\_11\_05066 Low affinity iron permease

P28\_London\_17\_02\_11\_05067 hypothetical protein

P28\_London\_17\_02\_11\_05068 putative manganese catalase

P28\_London\_17\_02\_11\_05069 hypothetical protein

P28\_London\_17\_02\_11\_05070 hypothetical protein

P28\_London\_17\_02\_11\_05071 hypothetical protein

P28\_London\_17\_02\_11\_05072 Carboxylate-amine ligase YbdK

P28\_London\_17\_02\_11\_05075 Bicarbonate transport ATP-binding protein CmpC

P28\_London\_17\_02\_11\_05076 hypothetical protein

P28\_London\_17\_02\_11\_05078 Right origin-binding protein

P28\_London\_17\_02\_11\_05090 Fructosamine kinase FrID

P28\_London\_17\_02\_11\_05093 Dibenzothiophene desulfurization enzyme C

P28\_London\_17\_02\_11\_05102 Methanesulfonate monooxygenase

P28\_London\_17\_02\_11\_05109 Hydrogen cyanide synthase subunit HcnB

P28\_London\_17\_02\_11\_05110 Hydrogen cyanide synthase subunit HcnA

P28\_London\_17\_02\_11\_05120 Threonine-phosphate decarboxylase

P28\_London\_17\_02\_11\_05193 hypothetical protein

P28\_London\_17\_02\_11\_05224 Cytochrome c-type biogenesis protein CcmH precursor

P28\_London\_17\_02\_11\_05226 hypothetical protein

P28\_London\_17\_02\_11\_05229 Peptidase family S58

P28\_London\_17\_02\_11\_05230 Glycerol kinase

P28\_London\_17\_02\_11\_05247 HTH-type transcriptional regulator RutR

P28\_London\_17\_02\_11\_05254 hypothetical protein

P28\_London\_17\_02\_11\_05255 Lactonizing lipase precursor

P28\_London\_17\_02\_11\_05256 2'-5'-RNA ligase

P28\_London\_17\_02\_11\_05260 Lipoprotein-releasing system ATP-binding protein Loid

P28\_London\_17\_02\_11\_05264 tRNA-Ser(gga)

P28\_London\_17\_02\_11\_05267 Organic hydroperoxide resistance protein OhrB

P28\_London\_17\_02\_11\_05270 Sulfite exporter TauE/SafE

P28\_London\_17\_02\_11\_05284 Universal stress protein family protein

P28\_London\_17\_02\_11\_05288 hypothetical protein

P28\_London\_17\_02\_11\_05299 hypothetical protein

P28\_London\_17\_02\_11\_05301 EcoKI restriction-modification system protein HsdS

P28\_London\_17\_02\_11\_05303 Prophage CP4-57 integrase

P28\_London\_17\_02\_11\_05304 hypothetical protein

P28\_London\_17\_02\_11\_05305 PglZ domain protein

P28\_London\_17\_02\_11\_05306 hypothetical protein

P28\_London\_17\_02\_11\_05307 hypothetical protein

P28\_London\_17\_02\_11\_05308 Reverse transcriptase (RNA-dependent DNA polymerase)

P28\_London\_17\_02\_11\_05309 hypothetical protein

P28\_London\_17\_02\_11\_05310 DNA replication and repair protein RecF

P28\_London\_17\_02\_11\_05311 N-6 DNA Methylase

P28\_London\_17\_02\_11\_05324 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_05333 fec operon regulator FecR

P28\_London\_17\_02\_11\_05338 Nucleoside 2-deoxyribosyltransferase

P28\_London\_17\_02\_11\_05342 Nuclease SbcCD subunit C

P28\_London\_17\_02\_11\_05348 HTH-type transcriptional repressor of iron proteins A

P28\_London\_17\_02\_11\_05349 putative chromate transport protein

P28\_London\_17\_02\_11\_05358 hypothetical protein

P28\_London\_17\_02\_11\_05365 SAF domain protein

P28\_London\_17\_02\_11\_05367 HTH-type transcriptional regulator DmlR

P28\_London\_17\_02\_11\_05372 hypothetical protein

P28\_London\_17\_02\_11\_05374 taurine transporter substrate binding subunit

P28\_London\_17\_02\_11\_05390 HEAT repeat

P28\_London\_17\_02\_11\_05396 hypothetical protein

P28\_London\_17\_02\_11\_05403 2-halobenzoate 1%2C2-dioxygenase large subunit

P28\_London\_17\_02\_11\_05407 Anthranilate 1%2C2-dioxygenase electron transfer component

P28\_London\_17\_02\_11\_05408 Anthranilate 1%2C2-dioxygenase small subunit

P28\_London\_17\_02\_11\_05409 Anthranilate 1%2C2-dioxygenase large subunit



P28\_London\_17\_02\_11\_05416 HTH-type transcriptional regulator PuuR

P28\_London\_17\_02\_11\_05436 Nitrite reductase precursor

P28\_London\_17\_02\_11\_05444 putative HTH-type transcriptional regulator

P28\_London\_17\_02\_11\_05445 hypothetical protein

P28\_London\_17\_02\_11\_05446 Mu DNA-binding domain protein

P28\_London\_17\_02\_11\_05447 hypothetical protein

P28\_London\_17\_02\_11\_05448 hypothetical protein

P28\_London\_17\_02\_11\_05449 hypothetical protein

P28\_London\_17\_02\_11\_05450 Chemotaxis response regulator protein-glutamate methyltransferase of group 2 operon

P28\_London\_17\_02\_11\_05479 D-erythro-7%2C8-dihydroneopterin triphosphate epimerase

P28\_London\_17\_02\_11\_05483 Aliphatic sulfonates import ATP-binding protein SsuB

P28\_London\_17\_02\_11\_05490 Putative aliphatic sulfonates-binding protein precursor

P28\_London\_17\_02\_11\_05504 hypothetical protein

P28\_London\_17\_02\_11\_05510 Maleylpyruvate isomerase

P28\_London\_17\_02\_11\_05518 putative succinyl-CoA:3-ketoacid coenzyme A transferase subunit A

P28\_London\_17\_02\_11\_05525 Autoinducer 2 sensor kinase/phosphatase LuxQ

P28\_London\_17\_02\_11\_05561 hypothetical protein

P28\_London\_17\_02\_11\_05574 Glutamine synthetase

P28\_London\_17\_02\_11\_05591 Cytochrome c5

P28\_London\_17\_02\_11\_05623 O-acetyltransferase OatA

P28\_London\_17\_02\_11\_05635 hypothetical protein

P28\_London\_17\_02\_11\_05669 GTPase Der

P28\_London\_17\_02\_11\_05676 hypothetical protein

P28\_London\_17\_02\_11\_05685 hypothetical protein

P28\_London\_17\_02\_11\_05696 hypothetical protein

P28\_London\_17\_02\_11\_05701 Glyoxalase-like domain protein

P28\_London\_17\_02\_11\_05708 hypothetical protein

P28\_London\_17\_02\_11\_05714 hypothetical protein

P28\_London\_17\_02\_11\_05716 hypothetical protein

P28\_London\_17\_02\_11\_05720 HTH-type transcriptional regulator GbpR

P28\_London\_17\_02\_11\_05729 Thiol:disulfide interchange protein DsbD precursor

P28\_London\_17\_02\_11\_05739 HTH-type transcriptional repressor of iron proteins A

P28\_London\_17\_02\_11\_05740 Multiple antibiotic resistance protein MarA

P28\_London\_17\_02\_11\_05741 Cupin domain protein

P28\_London\_17\_02\_11\_05759 4-hydroxy-tetrahydrodipicolinate synthase

P28\_London\_17\_02\_11\_05769 Diaminobutyrate--2-oxoglutarate aminotransferase

P28\_London\_17\_02\_11\_05771 Linear gramicidin dehydrogenase LgrE

P28\_London\_17\_02\_11\_05773 High-affinity zinc uptake system membrane protein ZnuB

P28\_London\_17\_02\_11\_05776 hypothetical protein

P28\_London\_17\_02\_11\_05786 hypothetical protein

P28\_London\_17\_02\_11\_05789 Isochorismatase family protein

P28\_London\_17\_02\_11\_05790 Glycine cleavage system transcriptional activator

P28\_London\_17\_02\_11\_05805 hypothetical protein

P28\_London\_17\_02\_11\_05808 hypothetical protein

P28\_London\_17\_02\_11\_05811 Acetyltransferase

P28\_London\_17\_02\_11\_05832 Copper resistance protein B precursor

P28\_London\_17\_02\_11\_05837 Inner membrane ABC transporter permease protein YejE

P28\_London\_17\_02\_11\_05839 Regulator of nucleoside diphosphate kinase

P28\_London\_17\_02\_11\_05840 Protein CyaY

P28\_London\_17\_02\_11\_05846 Flavin mononucleotide phosphatase YigB

P28\_London\_17\_02\_11\_05850 hypothetical protein

P28\_London\_17\_02\_11\_05851 hypothetical protein

P28\_London\_17\_02\_11\_05864 hypothetical protein

P28\_London\_17\_02\_11\_05889 Ubiquinol-cytochrome c reductase iron-sulfur subunit

P28\_London\_17\_02\_11\_05897 Tryptophan--tRNA ligase

P28\_London\_17\_02\_11\_05915 hypothetical protein

P28\_London\_17\_02\_11\_05923 Nitrogen regulatory protein

P28\_London\_17\_02\_11\_05934 2-oxoglutaramate amidase

P28\_London\_17\_02\_11\_05939 Cell shape-determining protein MreC

P28\_London\_17\_02\_11\_05940 Rod shape-determining protein MreB

P28\_London\_17\_02\_11\_05941 Glutamyl-tRNA(Gln) amidotransferase subunit C

P28\_London\_17\_02\_11\_05960 Porin D precursor

P28\_London\_17\_02\_11\_05964 Oligopeptide transport ATP-binding protein OppD

P28\_London\_17\_02\_11\_05966 Homoserine/homoserine lactone efflux protein

P28\_London\_17\_02\_11\_05967 Leucine-responsive regulatory protein

P28\_London\_17\_02\_11\_05968 Kipl antagonist

P28\_London\_17\_02\_11\_05969 Kinase A inhibitor

P28\_London\_17\_02\_11\_05972 Sulfite reductase [NADPH] flavoprotein alpha-component

P28\_London\_17\_02\_11\_05973 putative TonB-dependent receptor BfrD precursor

P28\_London\_17\_02\_11\_05974 PKHD-type hydroxylase

P28\_London\_17\_02\_11\_05975 Beta-lactamase HcpA precursor

P28\_London\_17\_02\_11\_05976 Phosphoethanolamine transferase EptC

P28\_London\_17\_02\_11\_05977 Glyoxalase-like domain protein

P28\_London\_17\_02\_11\_05978 Lysine/ornithine decarboxylase

P28\_London\_17\_02\_11\_05979 Methyl-accepting chemotaxis protein PctB

P28\_London\_17\_02\_11\_05980 regulatory protein AmpE

P28\_London\_17\_02\_11\_05981 1%2C6-anhydro-N-acetylmuramyl-L-alanine amidase AmpD

P28\_London\_17\_02\_11\_05982 hypothetical protein

P28\_London\_17\_02\_11\_05983 Nicotinate-nucleotide pyrophosphorylase [carboxylating]

P28\_London\_17\_02\_11\_05984 O-Antigen ligase

P28\_London\_17\_02\_11\_05985 Fimbrial protein precursor

P28\_London\_17\_02\_11\_05986 Type II secretion system protein E

P28\_London\_17\_02\_11\_06004 hypothetical protein

P28\_London\_17\_02\_11\_06005 hypothetical protein

P28\_London\_17\_02\_11\_06007 hypothetical protein

P28\_London\_17\_02\_11\_06008 hypothetical protein

P28\_London\_17\_02\_11\_06010 hypothetical protein

P28\_London\_17\_02\_11\_06011 hypothetical protein

P28\_London\_17\_02\_11\_06012 hypothetical protein

P28\_London\_17\_02\_11\_06015 hypothetical protein

P28\_London\_17\_02\_11\_06017 hypothetical protein

P28\_London\_17\_02\_11\_06029 hypothetical protein

P28\_London\_17\_02\_11\_06049 Porin D precursor

P28\_London\_17\_02\_11\_06050 hypothetical protein

P28\_London\_17\_02\_11\_06051 hypothetical protein

P28\_London\_17\_02\_11\_06052 E3 ubiquitin-protein ligase SlrP

P28\_London\_17\_02\_11\_06053 hypothetical protein

P28\_London\_17\_02\_11\_06054 putative transporter YycB

P28\_London\_17\_02\_11\_06055 Guanine deaminase

P28\_London\_17\_02\_11\_06056 Ankyrin repeats (3 copies)

P28\_London\_17\_02\_11\_06057 HTH-type transcriptional regulator YofA

P28\_London\_17\_02\_11\_06058 DinB family protein

P28\_London\_17\_02\_11\_06059 Toluene efflux pump outer membrane protein Ttgl precursor

P28\_London\_17\_02\_11\_06060 Efflux pump membrane transporter BepE

P28\_London\_17\_02\_11\_06061 Efflux pump periplasmic linker BepF

P28\_London\_17\_02\_11\_06062 Nodulation protein D 2

P28\_London\_17\_02\_11\_06063 Quinone oxidoreductase 1

P28\_London\_17\_02\_11\_06071 Hydroperoxy fatty acid reductase gpx2

P28\_London\_17\_02\_11\_06082 hypothetical protein

P28\_London\_17\_02\_11\_06086 Putative prophage CPS-53 integrase

P28\_London\_17\_02\_11\_06087 Transposase DDE domain protein

P28\_London\_17\_02\_11\_06088 Cation efflux system protein CusA

P28\_London\_17\_02\_11\_06089 Cation efflux system protein CusB precursor

P28\_London\_17\_02\_11\_06090 Outer membrane efflux protein

P28\_London\_17\_02\_11\_06091 hypothetical protein

P28\_London\_17\_02\_11\_06092 hypothetical protein

P28\_London\_17\_02\_11\_06095 Ubiquinone biosynthesis O-methyltransferase

P28\_London\_17\_02\_11\_06096 hypothetical protein

P28\_London\_17\_02\_11\_06102 Glycine cleavage system H protein

P28\_London\_17\_02\_11\_06104 fec operon regulator FecR

P28\_London\_17\_02\_11\_06107 Antibiotic biosynthesis monooxygenase

P28\_London\_17\_02\_11\_06108 Regulatory protein PchR

P28\_London\_17\_02\_11\_06110 Putative membrane protein insertion efficiency factor

P28\_London\_17\_02\_11\_06118 hypothetical protein

P28\_London\_17\_02\_11\_06127 Phage Coat protein B

P28\_London\_17\_02\_11\_06128 hypothetical protein

P28\_London\_17\_02\_11\_06129 hypothetical protein

P28\_London\_17\_02\_11\_06130 hypothetical protein

P28\_London\_17\_02\_11\_06131 hypothetical protein

P28\_London\_17\_02\_11\_06132 hypothetical protein

P28\_London\_17\_02\_11\_06139 hypothetical protein

P28\_London\_17\_02\_11\_06140 hypothetical protein

P28\_London\_17\_02\_11\_06141 hypothetical protein

P28\_London\_17\_02\_11\_06142 hypothetical protein

P28\_London\_17\_02\_11\_06143 hypothetical protein

P28\_London\_17\_02\_11\_06144 hypothetical protein

P28\_London\_17\_02\_11\_06145 hypothetical protein

P28\_London\_17\_02\_11\_06146 Mu-like prophage major head subunit gpT

P28\_London\_17\_02\_11\_06147 hypothetical protein

P28\_London\_17\_02\_11\_06148 Mu-like prophage I protein

P28\_London\_17\_02\_11\_06149 hypothetical protein

P28\_London\_17\_02\_11\_06150 hypothetical protein

P28\_London\_17\_02\_11\_06151 Phage virion morphogenesis family protein

P28\_London\_17\_02\_11\_06152 Phage Mu protein F like protein

P28\_London\_17\_02\_11\_06153 hypothetical protein

P28\_London\_17\_02\_11\_06154 hypothetical protein

P28\_London\_17\_02\_11\_06155 hypothetical protein

P28\_London\_17\_02\_11\_06156 hypothetical protein

P28\_London\_17\_02\_11\_06157 hypothetical protein

P28\_London\_17\_02\_11\_06158 hypothetical protein

P28\_London\_17\_02\_11\_06159 hypothetical protein

P28\_London\_17\_02\_11\_06160 hypothetical protein

P28\_London\_17\_02\_11\_06161 hypothetical protein

P28\_London\_17\_02\_11\_06162 Acyl-CoA dehydrogenase

P28\_London\_17\_02\_11\_06169 8-amino-7-oxononanoate synthase

P28\_London\_17\_02\_11\_06199 fec operon regulator FecR

P28\_London\_17\_02\_11\_06204 hypothetical protein

P28\_London\_17\_02\_11\_06205 hypothetical protein

P28\_London\_17\_02\_11\_06210 putative acyltransferase YihG

P28\_London\_17\_02\_11\_06221 hypothetical protein

P28\_London\_17\_02\_11\_06237 hypothetical protein

P28\_London\_17\_02\_11\_06241 hypothetical protein

P28\_London\_17\_02\_11\_06253 Threonine efflux protein

P28\_London\_17\_02\_11\_06269 Dihydroorotase

P28\_London\_17\_02\_11\_06292 Thermoresistant gluconokinase

P28\_London\_17\_02\_11\_06296 Dibenzothiophene desulfurization enzyme C

P28\_London\_17\_02\_11\_06308 hypothetical protein

P28\_London\_17\_02\_11\_06311 hypothetical protein

P28\_London\_17\_02\_11\_06312 hypothetical protein

P28\_London\_17\_02\_11\_06313 hypothetical protein

P28\_London\_17\_02\_11\_06314 hypothetical protein

P28\_London\_17\_02\_11\_06315 Mu-like prophage major head subunit gpT

P28\_London\_17\_02\_11\_06316 Mu-like prophage I protein

P28\_London\_17\_02\_11\_06317 Phage virion morphogenesis family protein

P28\_London\_17\_02\_11\_06318 Phage Mu protein F like protein

P28\_London\_17\_02\_11\_06319 hypothetical protein

P28\_London\_17\_02\_11\_06321 Adenosine monophosphate-protein transferase and cysteine protease IbpA precursor

P28\_London\_17\_02\_11\_06322 Cyanate hydratase

P28\_London\_17\_02\_11\_06325 putative MFS-type transporter EfpA

P28\_London\_17\_02\_11\_06328 Oligopeptide-binding protein AppA precursor

P28\_London\_17\_02\_11\_06344 hypothetical protein

P28\_London\_17\_02\_11\_06354 Phenazine biosynthesis protein PhzB 2

P28\_London\_17\_02\_11\_06355 Phenazine biosynthesis protein PhzB 2

P28\_London\_17\_02\_11\_06390 hypothetical protein

P28\_London\_17\_02\_11\_06393 hypothetical protein

P28\_London\_17\_02\_11\_06394 hypothetical protein

P28\_London\_17\_02\_11\_06400 hypothetical protein

P28\_London\_17\_02\_11\_06416 Ammonia channel precursor

P28\_London\_17\_02\_11\_06419 Pyridoxamine 5'-phosphate oxidase

P28\_London\_17\_02\_11\_06424 tRNA-Pro(cgg)

P28\_London\_17\_02\_11\_06435 hypothetical protein

P28\_London\_17\_02\_11\_06466 Glycerophosphoryl diester phosphodiesterase

S1\_London\_17\_VIM\_2\_02\_09\_00018 Tyrosine recombinase XerD

S1\_London\_17\_VIM\_2\_02\_09\_00019 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00020 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00021 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00022 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00023 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00024 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00025 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00026 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00027 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00028 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00029 hypothetical protein

S1\_London\_17\_VIM\_2\_02\_09\_00030 Ogr/Delta-like zinc finger

S1\_London\_17\_VIM\_2\_02\_09\_00031 portal vertex protein

S1\_London\_17\_VIM\_2\_02\_09\_00032 terminase ATPase subunit

S1\_London\_17\_VIM\_2\_02\_09\_00033 capsid-scaffolding protein

S1\_London\_17\_VIM\_2\_02\_09\_00034 capsid protein

S1\_London\_17\_VIM\_2\_02\_09\_00458 Nucleoid-associated protein YejK

S1\_London\_17\_VIM\_2\_02\_09\_00833 Beta-lactamase 2 precursor

S1\_London\_17\_VIM\_2\_02\_09\_00834 Dihydropteroate synthase

S1\_London\_17\_VIM\_2\_02\_09\_00835 putative acetyltransferase

S1\_London\_17\_VIM\_2\_02\_09\_00836 Bacterial TniB protein

S1\_London\_17\_VIM\_2\_02\_09\_00837 Transposon Tn7 transposition protein TnsB

S1\_London\_17\_VIM\_2\_02\_09\_00838 Bacteriophytochrome cph2



S1_London_17_VIM_2_02_09_00839	putative mercury resistance protein
S1_London_17_VIM_2_02_09_00840	transcriptional regulator MerD
S1_London_17_VIM_2_02_09_00841	Mercuric reductase
S1_London_17_VIM_2_02_09_00987	hypothetical protein
S1_London_17_VIM_2_02_09_01088	hypothetical protein
S1_London_17_VIM_2_02_09_01089	High-affinity choline transport protein
S1_London_17_VIM_2_02_09_01090	Competence protein ComM
S1_London_17_VIM_2_02_09_01366	dITP/XTP pyrophosphatase
S1_London_17_VIM_2_02_09_01876	hypothetical protein
S1_London_17_VIM_2_02_09_02211	tRNA-Ala(ggc)
S1_London_17_VIM_2_02_09_02473	Ribose-phosphate pyrophosphokinase
S1_London_17_VIM_2_02_09_03302	Serine hydroxymethyltransferase 2
S1_London_17_VIM_2_02_09_03650	putative membrane protein
S1_London_17_VIM_2_02_09_03996	hypothetical protein
S1_London_17_VIM_2_02_09_04090	Putative prophage CPS-53 integrase
S1_London_17_VIM_2_02_09_04091	hypothetical protein
S1_London_17_VIM_2_02_09_04092	DNA repair protein RadC
S1_London_17_VIM_2_02_09_04093	hypothetical protein
S1_London_17_VIM_2_02_09_04094	hypothetical protein
S1_London_17_VIM_2_02_09_04095	putative chromosome-partitioning protein ParB
S1_London_17_VIM_2_02_09_04096	hypothetical protein
S1_London_17_VIM_2_02_09_04098	transcriptional regulator%2C y4mF family
S1_London_17_VIM_2_02_09_04099	hypothetical protein
S1_London_17_VIM_2_02_09_04100	hypothetical protein
S1_London_17_VIM_2_02_09_04101	Helix-turn-helix domain protein
S1_London_17_VIM_2_02_09_04102	Replication initiator protein A
S1_London_17_VIM_2_02_09_04103	ParA-like protein

S1_London_17_VIM_2_02_09_04105	hypothetical protein
S1_London_17_VIM_2_02_09_04106	conjugal transfer pilin processing protease TraF
S1_London_17_VIM_2_02_09_04107	hypothetical protein
S1_London_17_VIM_2_02_09_04108	ABC-type uncharacterized transport system%2C auxiliary component
S1_London_17_VIM_2_02_09_04109	virulence factor Mce family protein
S1_London_17_VIM_2_02_09_04110	Methionine import ATP-binding protein MetN
S1_London_17_VIM_2_02_09_04111	putative phospholipid ABC transporter permease protein MlaE
S1_London_17_VIM_2_02_09_04112	hypothetical protein
S1_London_17_VIM_2_02_09_04113	Nickel and cobalt resistance protein CnrA
S1_London_17_VIM_2_02_09_04114	Multidrug resistance protein MdtE precursor
S1_London_17_VIM_2_02_09_04115	Potential acrAB operon repressor
S1_London_17_VIM_2_02_09_04116	putative efflux pump outer membrane protein TtgC precursor
S1_London_17_VIM_2_02_09_04117	Hca operon transcriptional activator
S1_London_17_VIM_2_02_09_04118	Quaternary ammonium compound-resistance protein SugE
S1_London_17_VIM_2_02_09_04119	hypothetical protein
S1_London_17_VIM_2_02_09_04120	hypothetical protein
S1_London_17_VIM_2_02_09_04121	hypothetical protein
S1_London_17_VIM_2_02_09_04122	Conjugal transfer protein TraG
S1_London_17_VIM_2_02_09_04123	Ribbon-helix-helix protein%2C copG family
S1_London_17_VIM_2_02_09_04124	Pertussis toxin liberation protein H
S1_London_17_VIM_2_02_09_04125	conjugal transfer protein TrbC
S1_London_17_VIM_2_02_09_04127	Type IV secretion system protein virB4
S1_London_17_VIM_2_02_09_04128	conjugal transfer protein TrbJ
S1_London_17_VIM_2_02_09_04129	hypothetical protein
S1_London_17_VIM_2_02_09_04130	conjugal transfer protein TrbL
S1_London_17_VIM_2_02_09_04131	conjugal transfer protein TrbF

S1_London_17_VIM_2_02_09_04132	Pertussis toxin liberation protein F
S1_London_17_VIM_2_02_09_04133	Type IV secretion system protein virB10
S1_London_17_VIM_2_02_09_04134	hypothetical protein
S1_London_17_VIM_2_02_09_04303	hypothetical protein
S1_London_17_VIM_2_02_09_04369	hypothetical protein
S1_London_17_VIM_2_02_09_05194	Phage head completion protein (GPL)
S1_London_17_VIM_2_02_09_05195	P2 phage tail completion protein R (GpR)
S1_London_17_VIM_2_02_09_05196	phage virion morphogenesis protein
S1_London_17_VIM_2_02_09_05197	hypothetical protein
S1_London_17_VIM_2_02_09_05198	hypothetical protein
S1_London_17_VIM_2_02_09_05199	DksA-like zinc finger domain containing protein
S1_London_17_VIM_2_02_09_05200	hypothetical protein
S1_London_17_VIM_2_02_09_05201	Lysozyme RrrD
S1_London_17_VIM_2_02_09_05202	Bacteriophage lysis protein
S1_London_17_VIM_2_02_09_05203	hypothetical protein
S1_London_17_VIM_2_02_09_05204	phage tail tape measure protein%2C TP901 family%2C core region
S1_London_17_VIM_2_02_09_05205	hypothetical protein
S1_London_17_VIM_2_02_09_05206	hypothetical protein
S1_London_17_VIM_2_02_09_05207	Bacteriophage P2-related tail formation protein
S1_London_17_VIM_2_02_09_05208	Tail fiber protein
S1_London_17_VIM_2_02_09_05209	hypothetical protein
S1_London_17_VIM_2_02_09_05210	hypothetical protein
S1_London_17_VIM_2_02_09_05211	hypothetical protein
S1_London_17_VIM_2_02_09_05212	hypothetical protein
S1_London_17_VIM_2_02_09_05213	hypothetical protein
S1_London_17_VIM_2_02_09_05214	hypothetical protein
S1_London_17_VIM_2_02_09_05215	YcfA-like protein

S1_London_17_VIM_2_02_09_05274	tRNA-Thr(cgt)
S1_London_17_VIM_2_02_09_05418	hypothetical protein
S1_London_17_VIM_2_02_09_05616	hypothetical protein
S1_London_17_VIM_2_02_09_05983	hypothetical protein
S1_London_17_VIM_2_02_09_06056	Crossover junction endodeoxyribonuclease RuvC
S1_London_17_VIM_2_02_09_06495	Serine/threonine-protein kinase PrkC
S2_London_17_VIM_2_02_09_01316	Gamma-glutamylputrescine synthetase PuuA
S2_London_17_VIM_2_02_09_01406	Putative transposase
S2_London_17_VIM_2_02_09_02254	hypothetical protein
S2_London_17_VIM_2_02_09_03934	NAD dependent epimerase/dehydratase family protein
S3_London_17_VIM_2_03_09_00828	Purine efflux pump PbuE
S3_London_17_VIM_2_03_09_02442	Putative prophage phiRv2 integrase
S3_London_17_VIM_2_03_09_02443	hypothetical protein
S3_London_17_VIM_2_03_09_02444	hypothetical protein
S3_London_17_VIM_2_03_09_02445	hypothetical protein
S3_London_17_VIM_2_03_09_02446	hypothetical protein
S3_London_17_VIM_2_03_09_02447	hypothetical protein
S3_London_17_VIM_2_03_09_02448	hypothetical protein
S3_London_17_VIM_2_03_09_02449	hypothetical protein
S3_London_17_VIM_2_03_09_02450	hypothetical protein
S3_London_17_VIM_2_03_09_02451	hypothetical protein
S3_London_17_VIM_2_03_09_02452	hypothetical protein
S3_London_17_VIM_2_03_09_02453	hypothetical protein
S3_London_17_VIM_2_03_09_02454	hypothetical protein
S3_London_17_VIM_2_03_09_02455	Single-stranded DNA-binding protein
S3_London_17_VIM_2_03_09_02456	YqaJ-like viral recombinase domain protein
S3_London_17_VIM_2_03_09_02457	RecT family protein

S3_London_17_VIM_2_03_09_02458	hypothetical protein
S3_London_17_VIM_2_03_09_02459	hypothetical protein
S3_London_17_VIM_2_03_09_02460	hypothetical protein
S3_London_17_VIM_2_03_09_02461	hypothetical protein
S3_London_17_VIM_2_03_09_02462	hypothetical protein
S3_London_17_VIM_2_03_09_02463	AP2 domain protein
S3_London_17_VIM_2_03_09_02464	hypothetical protein
S3_London_17_VIM_2_03_09_02465	hypothetical protein
S3_London_17_VIM_2_03_09_02466	hypothetical protein
S3_London_17_VIM_2_03_09_02467	hypothetical protein
S3_London_17_VIM_2_03_09_02468	hypothetical protein
S3_London_17_VIM_2_03_09_02629	hypothetical protein
S3_London_17_VIM_2_03_09_02630	hypothetical protein
S3_London_17_VIM_2_03_09_02631	hypothetical protein
S3_London_17_VIM_2_03_09_02632	hypothetical protein
S3_London_17_VIM_2_03_09_02633	hypothetical protein
S3_London_17_VIM_2_03_09_02640	hypothetical protein
S3_London_17_VIM_2_03_09_02654	hypothetical protein
S3_London_17_VIM_2_03_09_02657	hypothetical protein
S3_London_17_VIM_2_03_09_02658	hypothetical protein
S3_London_17_VIM_2_03_09_02664	hypothetical protein
S3_London_17_VIM_2_03_09_02665	hypothetical protein
S3_London_17_VIM_2_03_09_02672	hypothetical protein
S3_London_17_VIM_2_03_09_02674	hypothetical protein
S3_London_17_VIM_2_03_09_02679	DNA-binding transcriptional regulator Nlp
S3_London_17_VIM_2_03_09_03665	hypothetical protein
S3_London_17_VIM_2_03_09_03674	hypothetical protein

S3_London_17_VIM_2_03_09_03717	Paraquat-inducible protein B
S3_London_17_VIM_2_03_09_03901	hypothetical protein
S3_London_17_VIM_2_03_09_03902	hypothetical protein
S3_London_17_VIM_2_03_09_03903	hypothetical protein
S3_London_17_VIM_2_03_09_03904	Lysozyme RrrD
S3_London_17_VIM_2_03_09_03905	hypothetical protein
S3_London_17_VIM_2_03_09_03906	HIRAN domain protein
S3_London_17_VIM_2_03_09_03907	hypothetical protein
S3_London_17_VIM_2_03_09_03908	Toxin HigB-2
S3_London_17_VIM_2_03_09_03909	Antitoxin igA-2
S3_London_17_VIM_2_03_09_03910	Pectate lyase superfamily protein
S3_London_17_VIM_2_03_09_03911	hypothetical protein
S3_London_17_VIM_2_03_09_03912	hypothetical protein
S3_London_17_VIM_2_03_09_03913	hypothetical protein
S3_London_17_VIM_2_03_09_03914	hypothetical protein
S3_London_17_VIM_2_03_09_03915	hypothetical protein
S3_London_17_VIM_2_03_09_03916	hypothetical protein
S3_London_17_VIM_2_03_09_03917	Bacterial Ig-like domain (group 2)
S3_London_17_VIM_2_03_09_03918	hypothetical protein
S3_London_17_VIM_2_03_09_03919	hypothetical protein
S3_London_17_VIM_2_03_09_03920	hypothetical protein
S3_London_17_VIM_2_03_09_03921	hypothetical protein
S3_London_17_VIM_2_03_09_03922	hypothetical protein
S3_London_17_VIM_2_03_09_03923	hypothetical protein
S3_London_17_VIM_2_03_09_03924	hypothetical protein
S3_London_17_VIM_2_03_09_03925	Phage Mu protein F like protein
S3_London_17_VIM_2_03_09_03926	hypothetical protein

S3_London_17_VIM_2_03_09_03927	hypothetical protein
S3_London_17_VIM_2_03_09_03928	Phage terminase large subunit
S3_London_17_VIM_2_03_09_03929	hypothetical protein
S3_London_17_VIM_2_03_09_03930	hypothetical protein
S3_London_17_VIM_2_03_09_03931	hypothetical protein
S3_London_17_VIM_2_03_09_03932	hypothetical protein
S3_London_17_VIM_2_03_09_03933	tRNA-Thr(tgt)
S3_London_17_VIM_2_03_09_03934	tRNA-Asn(gtt)
S3_London_17_VIM_2_03_09_03935	tRNA-Gly(tcc)
S3_London_17_VIM_2_03_09_03936	hypothetical protein
S3_London_17_VIM_2_03_09_03937	hypothetical protein
S3_London_17_VIM_2_03_09_03938	hypothetical protein
S3_London_17_VIM_2_03_09_03939	Bacteriophage Lambda NinG protein
S3_London_17_VIM_2_03_09_03940	hypothetical protein
S3_London_17_VIM_2_03_09_03941	hypothetical protein
S3_London_17_VIM_2_03_09_03942	hypothetical protein
S3_London_17_VIM_2_03_09_03943	hypothetical protein
S3_London_17_VIM_2_03_09_03944	hypothetical protein
S3_London_17_VIM_2_03_09_03945	hypothetical protein
S3_London_17_VIM_2_03_09_03946	DNA primase
S3_London_17_VIM_2_03_09_03947	hypothetical protein
S3_London_17_VIM_2_03_09_03948	T5orf172 domain protein
S3_London_17_VIM_2_03_09_03949	hypothetical protein
S3_London_17_VIM_2_03_09_03950	Bacteriophage CII protein
S3_London_17_VIM_2_03_09_03951	putative HTH-type transcriptional regulator
S3_London_17_VIM_2_03_09_03952	hypothetical protein
S3_London_17_VIM_2_03_09_03953	hypothetical protein

S3\_London\_17\_VIM\_2\_03\_09\_03954 hypothetical protein

S3\_London\_17\_VIM\_2\_03\_09\_05204 hypothetical protein

S3\_London\_17\_VIM\_2\_03\_09\_05468 hypothetical protein

S3\_London\_17\_VIM\_2\_03\_09\_05894 Phage small terminase subunit

S3\_London\_17\_VIM\_2\_03\_09\_06342 hypothetical protein

S3\_London\_17\_VIM\_2\_03\_09\_06453 Pyruvate dehydrogenase E1 component subunit beta

S4\_London\_17\_VIM\_2\_03\_09\_00262 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_00471 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05389 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05740 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05741 Ogr/Delta-like zinc finger

S4\_London\_17\_VIM\_2\_03\_09\_05742 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05743 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05744 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05745 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05747 Helix-turn-helix domain protein

S4\_London\_17\_VIM\_2\_03\_09\_05749 hypothetical protein

S4\_London\_17\_VIM\_2\_03\_09\_05750 Prophage CP4-57 regulatory protein (AlpA)

S4\_London\_17\_VIM\_2\_03\_09\_05751 Phage integrase family protein

S4\_London\_17\_VIM\_2\_03\_09\_06384 hypothetical protein

P7\_London\_17\_VIM\_2\_06\_09\_00020 hypothetical protein

P7\_London\_17\_VIM\_2\_06\_09\_00833 hypothetical protein

P7\_London\_17\_VIM\_2\_06\_09\_05427 tRNA-Gly(ccc)

P11\_London\_17\_VIM\_2\_10\_09\_05431 hypothetical protein

P11\_London\_17\_VIM\_2\_10\_09\_06328 Putative phosphinothricin acetyltransferase YwnH

P12\_London\_17\_VIM\_2\_11\_09\_00679 ComEC family competence protein

P12\_London\_17\_VIM\_2\_11\_09\_05076 hypothetical protein



P12\_London\_17\_VIM\_2\_11\_09\_05077 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05078 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05079 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05080 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05081 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05082 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05083 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05084 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05085 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05086 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05087 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05088 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05089 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05090 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05091 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05092 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05093 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05094 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05095 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05096 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05097 Phage gp6-like head-tail connector protein

P12\_London\_17\_VIM\_2\_11\_09\_05098 HeH/LEM domain protein

P12\_London\_17\_VIM\_2\_11\_09\_05099 Phage capsid family protein

P12\_London\_17\_VIM\_2\_11\_09\_05100 Caudovirus prohead protease

P12\_London\_17\_VIM\_2\_11\_09\_05101 Phage portal protein

P12\_London\_17\_VIM\_2\_11\_09\_05102 Phage Terminase

P12\_London\_17\_VIM\_2\_11\_09\_05103 Phage terminase%2C small subunit

P12\_London\_17\_VIM\_2\_11\_09\_05104 HNH endonuclease

P12\_London\_17\_VIM\_2\_11\_09\_05105 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05106 Chitinase class I

P12\_London\_17\_VIM\_2\_11\_09\_05107 Phage holin family (Lysis protein S)

P12\_London\_17\_VIM\_2\_11\_09\_05108 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05109 Phage antitermination protein Q

P12\_London\_17\_VIM\_2\_11\_09\_05110 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05111 Replicative DNA helicase

P12\_London\_17\_VIM\_2\_11\_09\_05112 DNA replication protein DnaC

P12\_London\_17\_VIM\_2\_11\_09\_05113 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05114 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05115 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05116 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05117 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05118 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05119 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05120 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05121 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05122 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05123 putative HTH-type transcriptional regulator

P12\_London\_17\_VIM\_2\_11\_09\_05124 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05125 Bacterial regulatory proteins%2C luxR family

P12\_London\_17\_VIM\_2\_11\_09\_05126 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05127 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05128 Arc-like DNA binding domain protein

P12\_London\_17\_VIM\_2\_11\_09\_05129 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05130 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05131 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05132 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05133 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05134 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05135 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05136 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05137 hypothetical protein

P12\_London\_17\_VIM\_2\_11\_09\_05138 Phage integrase family protein

P12\_London\_17\_VIM\_2\_11\_09\_06519 Transposase

P14\_London\_17\_VIM\_2\_01\_10\_01432 hypothetical protein

P14\_London\_17\_VIM\_2\_01\_10\_03683 Inner membrane ABC transporter permease protein YejB

P14\_London\_17\_VIM\_2\_01\_10\_04785 hypothetical protein

P15\_London\_17\_VIM\_2\_02\_10\_02439 hypothetical protein

P16\_London\_17\_VIM\_2\_02\_10\_00340 hypothetical protein

P16\_London\_17\_VIM\_2\_02\_10\_00499 hypothetical protein

P18\_London\_17\_VIM\_2\_04\_10\_00313 Aerobic cobaltochelatase subunit CobN

P18\_London\_17\_VIM\_2\_04\_10\_01105 hypothetical protein

P18\_London\_17\_VIM\_2\_04\_10\_01640 hypothetical protein

P18\_London\_17\_VIM\_2\_04\_10\_03467 Acetaldehyde dehydrogenase 2

P18\_London\_17\_VIM\_2\_04\_10\_03844 Chromosome partition protein Smc

P18\_London\_17\_VIM\_2\_04\_10\_04492 Haemagglutinin repeat

P18\_London\_17\_VIM\_2\_04\_10\_06193 hypothetical protein

P21\_London\_17\_VIM\_2\_06\_10\_05090 hypothetical protein

P24\_London\_17\_VIM\_2\_08\_10\_01340 hypothetical protein

P45\_London\_17\_VIM\_2\_12\_12\_00938 hypothetical protein

P45\_London\_17\_VIM\_2\_12\_12\_02200 hypothetical protein

P45\_London\_17\_VIM\_2\_12\_12\_04929 DNA-invertase hin

P45\_London\_17\_VIM\_2\_12\_12\_05989 hypothetical protein

E1\_London\_17\_VIM\_2\_12\_12\_01087 hypothetical protein

E1\_London\_17\_VIM\_2\_12\_12\_01179 Gamma-glutamylputrescine synthetase PuuA

E1\_London\_17\_VIM\_2\_12\_12\_03045 Transposase%2C TnpA family

E1\_London\_17\_VIM\_2\_12\_12\_03735 hypothetical protein

E1\_London\_17\_VIM\_2\_12\_12\_03768 hypothetical protein

E1\_London\_17\_VIM\_2\_12\_12\_03913 Tyrocidine synthase III

E1\_London\_17\_VIM\_2\_12\_12\_03914 Linear gramicidin synthase subunit B

E1\_London\_17\_VIM\_2\_12\_12\_04078 hypothetical protein

E1\_London\_17\_VIM\_2\_12\_12\_04903 C4-dicarboxylate transport sensor protein DctB

E1\_London\_17\_VIM\_2\_12\_12\_05577 Secreted protein hcp

E1\_London\_17\_VIM\_2\_12\_12\_05719 p120

E1\_London\_17\_VIM\_2\_12\_12\_05879 Retron-type reverse transcriptase

E1\_London\_17\_VIM\_2\_12\_12\_06118 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_00219 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_01381 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02498 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02600 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02779 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02780 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02781 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02782 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02792 Nitrate reductase

E2\_London\_17\_VIM\_2\_12\_12\_02864 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02865 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02866 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_02937 hypothetical protein

E2_London_17_VIM_2_12_12_02938	hypothetical protein
E2_London_17_VIM_2_12_12_02939	Ribonuclease HI
E2_London_17_VIM_2_12_12_02940	hypothetical protein
E2_London_17_VIM_2_12_12_02941	putative acetyltransferase
E2_London_17_VIM_2_12_12_02942	kelch-like protein
E2_London_17_VIM_2_12_12_02943	hypothetical protein
E2_London_17_VIM_2_12_12_02944	hypothetical protein
E2_London_17_VIM_2_12_12_02947	hypothetical protein
E2_London_17_VIM_2_12_12_02948	hypothetical protein
E2_London_17_VIM_2_12_12_02949	hypothetical protein
E2_London_17_VIM_2_12_12_03015	hypothetical protein
E2_London_17_VIM_2_12_12_03017	hypothetical protein
E2_London_17_VIM_2_12_12_03083	hypothetical protein
E2_London_17_VIM_2_12_12_03084	hypothetical protein
E2_London_17_VIM_2_12_12_03085	hypothetical protein
E2_London_17_VIM_2_12_12_03312	hypothetical protein
E2_London_17_VIM_2_12_12_03313	hypothetical protein
E2_London_17_VIM_2_12_12_03315	hypothetical protein
E2_London_17_VIM_2_12_12_03317	hypothetical protein
E2_London_17_VIM_2_12_12_03382	hypothetical protein
E2_London_17_VIM_2_12_12_03383	hypothetical protein
E2_London_17_VIM_2_12_12_03384	hypothetical protein
E2_London_17_VIM_2_12_12_03387	hypothetical protein
E2_London_17_VIM_2_12_12_03445	hypothetical protein
E2_London_17_VIM_2_12_12_03446	hypothetical protein
E2_London_17_VIM_2_12_12_03447	hypothetical protein
E2_London_17_VIM_2_12_12_03448	hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_03449 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03450 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03523 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03524 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03525 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03526 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03582 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03584 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03585 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03587 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03648 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03649 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03650 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03651 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03710 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03764 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03765 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03766 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03813 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03864 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03865 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_03866 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04074 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04075 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04076 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04130 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04131 hypothetical protein

E2\_London\_17\_VIM\_2\_12\_12\_04170 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04212 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04213 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04260 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04261 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04404 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04665 hypothetical protein  
E2\_London\_17\_VIM\_2\_12\_12\_04706 hypothetical protein  
P48\_London\_17\_VIM\_2\_01\_13\_01934 hypothetical protein  
P48\_London\_17\_VIM\_2\_01\_13\_02234 Outer membrane protein D1  
P48\_London\_17\_VIM\_2\_01\_13\_03733 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_00384 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_01127 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_02456 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_02783 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_02897 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_03259 Penicillin amidase  
E12\_London\_17\_VIM\_2\_04\_14\_03953 Linear gramicidin synthase subunit B  
E12\_London\_17\_VIM\_2\_04\_14\_04586 Nuclease-related domain protein  
E12\_London\_17\_VIM\_2\_04\_14\_04727 p120  
E12\_London\_17\_VIM\_2\_04\_14\_04837 Outer membrane protein OprM precursor  
E12\_London\_17\_VIM\_2\_04\_14\_05069 hypothetical protein  
E12\_London\_17\_VIM\_2\_04\_14\_05485 hypothetical protein  
P33\_London\_28\_VIM\_2\_02\_12\_00588 Tyrosine recombinase XerD  
P33\_London\_28\_VIM\_2\_02\_12\_00599 DNA mismatch repair protein  
P33\_London\_28\_VIM\_2\_02\_12\_00600 Modification methylase HaeIII  
P33\_London\_28\_VIM\_2\_02\_12\_00622 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00623 Bacteriophage protein gp37

P33\_London\_28\_VIM\_2\_02\_12\_00624 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00625 putative transposase OrfB

P33\_London\_28\_VIM\_2\_02\_12\_00660 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00954 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00955 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00983 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_00984 Bacteriophage Lambda NinG protein

P33\_London\_28\_VIM\_2\_02\_12\_01001 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01002 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01003 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01004 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01005 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01006 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_01007 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_02252 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_03221 Hca operon transcriptional activator

P33\_London\_28\_VIM\_2\_02\_12\_04950 phage tail tape measure protein%2C lambda family

P33\_London\_28\_VIM\_2\_02\_12\_04951 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04952 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04963 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04964 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04968 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04969 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04979 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04980 hypothetical protein

P33\_London\_28\_VIM\_2\_02\_12\_04993 hypothetical protein



P33\_London\_28\_VIM\_2\_02\_12\_04996 Pyocin repressor protein

P34\_London\_28\_VIM\_2\_02\_12\_00715 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_00720 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02770 Putative prophage CPS-53 integrase

P34\_London\_28\_VIM\_2\_02\_12\_02771 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02772 putative zinc finger/helix-turn-helix protein%2C YgiT family

P34\_London\_28\_VIM\_2\_02\_12\_02773 Type I restriction enzyme EcoKI M protein

P34\_London\_28\_VIM\_2\_02\_12\_02774 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02775 Type I restriction enzyme EcoKI specificity protein

P34\_London\_28\_VIM\_2\_02\_12\_02776 cytochrome c biogenesis protein CcmA

P34\_London\_28\_VIM\_2\_02\_12\_02777 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02778 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02779 putative chromosome-partitioning protein ParB

P34\_London\_28\_VIM\_2\_02\_12\_02781 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02782 anaerobic benzoate catabolism transcriptional regulator

P34\_London\_28\_VIM\_2\_02\_12\_02783 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02784 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02785 Helix-turn-helix domain protein

P34\_London\_28\_VIM\_2\_02\_12\_02786 Replication initiator protein A

P34\_London\_28\_VIM\_2\_02\_12\_02787 ParA-like protein

P34\_London\_28\_VIM\_2\_02\_12\_02788 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02789 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02792 4-hydroxyphenylacetate 3-monooxygenase reductase subunit

P34\_London\_28\_VIM\_2\_02\_12\_02793 Xylose isomerase-like TIM barrel

P34\_London\_28\_VIM\_2\_02\_12\_02794 methylenetetrahydromethanopterin reductase

P34\_London\_28\_VIM\_2\_02\_12\_02795 Transposase

P34\_London\_28\_VIM\_2\_02\_12\_02796 putative permease

P34\_London\_28\_VIM\_2\_02\_12\_02797 Solvent efflux pump srpABC operon corepressor

P34\_London\_28\_VIM\_2\_02\_12\_02798 Efflux pump periplasmic linker BepF

P34\_London\_28\_VIM\_2\_02\_12\_02799 Efflux pump membrane transporter BepE

P34\_London\_28\_VIM\_2\_02\_12\_02800 Antibiotic efflux pump outer membrane protein ArpC precursor

P34\_London\_28\_VIM\_2\_02\_12\_02801 Ben and cat operon transcriptional regulator

P34\_London\_28\_VIM\_2\_02\_12\_02802 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02803 Conjugal transfer protein TraG

P34\_London\_28\_VIM\_2\_02\_12\_02804 Ribbon-helix-helix protein%2C copG family

P34\_London\_28\_VIM\_2\_02\_12\_02806 conjugal transfer protein TrbC

P34\_London\_28\_VIM\_2\_02\_12\_02808 Type IV secretion system protein virB4

P34\_London\_28\_VIM\_2\_02\_12\_02809 conjugal transfer protein TrbJ

P34\_London\_28\_VIM\_2\_02\_12\_02810 conjugal transfer protein TrbL

P34\_London\_28\_VIM\_2\_02\_12\_02812 Pertussis toxin liberation protein F

P34\_London\_28\_VIM\_2\_02\_12\_02813 Type IV secretion system protein virB10

P34\_London\_28\_VIM\_2\_02\_12\_02814 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_02815 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_03833 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_03834 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_03847 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_03848 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04350 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04353 putative phage-encoded protein

P34\_London\_28\_VIM\_2\_02\_12\_04354 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04355 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04357 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04358 Pyocin repressor protein

P34\_London\_28\_VIM\_2\_02\_12\_04363 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04364 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04365 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04366 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04367 putative phage-encoded protein

P34\_London\_28\_VIM\_2\_02\_12\_04375 phage regulatory protein%2C Rha family

P34\_London\_28\_VIM\_2\_02\_12\_04378 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04379 Bacteriophage lysis protein

P34\_London\_28\_VIM\_2\_02\_12\_04380 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04381 Phage DNA packaging protein Nu1

P34\_London\_28\_VIM\_2\_02\_12\_04382 Bacteriophage tail assembly protein

P34\_London\_28\_VIM\_2\_02\_12\_04383 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04384 phage portal protein%2C lambda family

P34\_London\_28\_VIM\_2\_02\_12\_04385 ATP-dependent Clp protease proteolytic subunit

P34\_London\_28\_VIM\_2\_02\_12\_04386 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04387 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04388 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04389 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04390 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04391 putative major pilin subunit

P34\_London\_28\_VIM\_2\_02\_12\_04392 tape measure domain protein

P34\_London\_28\_VIM\_2\_02\_12\_04393 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04394 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04395 hypothetical protein

P34\_London\_28\_VIM\_2\_02\_12\_04405 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_01170 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05669 Modification methylase DpnIIA

P37\_London\_28\_VIM\_2\_07\_12\_05671 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05672 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05673 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05674 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05675 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05677 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05678 tape measure domain protein

P37\_London\_28\_VIM\_2\_07\_12\_05679 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05680 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05681 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05682 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05683 Mu-like prophage protein gp36

P37\_London\_28\_VIM\_2\_07\_12\_05684 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05685 Mu-like prophage major head subunit gpT

P37\_London\_28\_VIM\_2\_07\_12\_05686 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05687 Mu-like prophage I protein

P37\_London\_28\_VIM\_2\_07\_12\_05688 phage virion morphogenesis protein

P37\_London\_28\_VIM\_2\_07\_12\_05689 Phage Mu protein F like protein

P37\_London\_28\_VIM\_2\_07\_12\_05690 Mu-like prophage protein gp29

P37\_London\_28\_VIM\_2\_07\_12\_05691 Mu-like prophage FluMu protein gp28

P37\_London\_28\_VIM\_2\_07\_12\_05692 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05693 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05694 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05695 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05696 membrane-bound lytic transglycosylase F

P37\_London\_28\_VIM\_2\_07\_12\_05697 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05698 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05699 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05700 phage-associated protein%2C BcepMu gp16 family

P37\_London\_28\_VIM\_2\_07\_12\_05701 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05702 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05703 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05704 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05705 Integrase core domain protein

P37\_London\_28\_VIM\_2\_07\_12\_05706 putative secretion ATPase%2C PEP-CTERM locus subfamily

P37\_London\_28\_VIM\_2\_07\_12\_05707 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05708 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05709 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05710 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05711 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05712 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05713 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05714 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05715 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05716 Mu-like prophage protein gp16

P37\_London\_28\_VIM\_2\_07\_12\_05717 hypothetical protein

P37\_London\_28\_VIM\_2\_07\_12\_05718 hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_00150 DNA primase TraC

P1\_London\_28\_IMP\_1\_04\_05\_00151 hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_00152 hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_00153 Thiol:disulfide interchange protein DsbG precursor

P1\_London\_28\_IMP\_1\_04\_05\_00154 Peptidase M15

P1\_London\_28\_IMP\_1\_04\_05\_00155 conjugative coupling factor TraD%2C SXT/TOL subfamily

P1\_London\_28\_IMP\_1\_04\_05\_00156 hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_00157 hypothetical protein

P1_London_28_IMP_1_04_05_00158	conjugal transfer protein TrbN
P1_London_28_IMP_1_04_05_00159	hypothetical protein
P1_London_28_IMP_1_04_05_00160	hypothetical protein
P1_London_28_IMP_1_04_05_00161	hypothetical protein
P1_London_28_IMP_1_04_05_00162	hypothetical protein
P1_London_28_IMP_1_04_05_00163	hypothetical protein
P1_London_28_IMP_1_04_05_00164	hypothetical protein
P1_London_28_IMP_1_04_05_00165	hypothetical protein
P1_London_28_IMP_1_04_05_00166	PilM
P1_London_28_IMP_1_04_05_00167	hypothetical protein
P1_London_28_IMP_1_04_05_00168	hypothetical protein
P1_London_28_IMP_1_04_05_00169	hypothetical protein
P1_London_28_IMP_1_04_05_00170	hypothetical protein
P1_London_28_IMP_1_04_05_00171	hypothetical protein
P1_London_28_IMP_1_04_05_00172	hypothetical protein
P1_London_28_IMP_1_04_05_00836	hypothetical protein
P1_London_28_IMP_1_04_05_00837	hypothetical protein
P1_London_28_IMP_1_04_05_00838	DNA sulfur modification protein DndB
P1_London_28_IMP_1_04_05_00839	hypothetical protein
P1_London_28_IMP_1_04_05_00840	SprT-like family protein
P1_London_28_IMP_1_04_05_00841	Px
P1_London_28_IMP_1_04_05_00842	hypothetical protein
P1_London_28_IMP_1_04_05_00843	Recombination-associated protein RdgC
P1_London_28_IMP_1_04_05_00844	DNA (cytosine-5-)-methyltransferase
P1_London_28_IMP_1_04_05_00845	hypothetical protein
P1_London_28_IMP_1_04_05_00846	hypothetical protein
P1_London_28_IMP_1_04_05_00847	hypothetical protein

P1_London_28_IMP_1_04_05_00848	hypothetical protein
P1_London_28_IMP_1_04_05_00849	Helix-destabilizing protein
P1_London_28_IMP_1_04_05_00850	Antitoxin ChpS
P1_London_28_IMP_1_04_05_00851	mRNA interferase ChpB
P1_London_28_IMP_1_04_05_00852	hypothetical protein
P1_London_28_IMP_1_04_05_00853	hypothetical protein
P1_London_28_IMP_1_04_05_00854	hypothetical protein
P1_London_28_IMP_1_04_05_00855	Replicative DNA helicase
P1_London_28_IMP_1_04_05_00898	Replicative DNA helicase
P1_London_28_IMP_1_04_05_00899	hypothetical protein
P1_London_28_IMP_1_04_05_00900	hypothetical protein
P1_London_28_IMP_1_04_05_00901	hypothetical protein
P1_London_28_IMP_1_04_05_00902	ATP-dependent helicase HepA
P1_London_28_IMP_1_04_05_00903	hypothetical protein
P1_London_28_IMP_1_04_05_00904	hypothetical protein
P1_London_28_IMP_1_04_05_00905	hypothetical protein
P1_London_28_IMP_1_04_05_00906	hypothetical protein
P1_London_28_IMP_1_04_05_00907	hypothetical protein
P1_London_28_IMP_1_04_05_00908	Cyclic di-GMP phosphodiesterase YfgF
P1_London_28_IMP_1_04_05_00909	hypothetical protein
P1_London_28_IMP_1_04_05_00910	hypothetical protein
P1_London_28_IMP_1_04_05_00911	DNA topoisomerase 3
P1_London_28_IMP_1_04_05_01830	hypothetical protein
P1_London_28_IMP_1_04_05_01831	Tyrosine recombinase XerC
P1_London_28_IMP_1_04_05_01832	hypothetical protein
P1_London_28_IMP_1_04_05_01837	hypothetical protein
P1_London_28_IMP_1_04_05_01838	DNA-dependent helicase II

P1_London_28_IMP_1_04_05_01902	hypothetical protein
P1_London_28_IMP_1_04_05_01931	hypothetical protein
P1_London_28_IMP_1_04_05_01932	hypothetical protein
P1_London_28_IMP_1_04_05_02164	hypothetical protein
P1_London_28_IMP_1_04_05_02165	hypothetical protein
P1_London_28_IMP_1_04_05_02257	hypothetical protein
P1_London_28_IMP_1_04_05_02557	Transglycosylase SLT domain protein
P1_London_28_IMP_1_04_05_02558	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02559	conjugative coupling factor TraD%2C PFGI-1 class
P1_London_28_IMP_1_04_05_02560	integrating conjugative element membrane protein%2C family
P1_London_28_IMP_1_04_05_02561	hypothetical protein
P1_London_28_IMP_1_04_05_02562	Helix-turn-helix
P1_London_28_IMP_1_04_05_02564	Patatin
P1_London_28_IMP_1_04_05_02565	hypothetical protein
P1_London_28_IMP_1_04_05_02566	thiamine biosynthesis protein ThiF
P1_London_28_IMP_1_04_05_02567	integrative conjugative element protein%2C RAQPRD family
P1_London_28_IMP_1_04_05_02568	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02569	integrating conjugative element membrane protein%2C family
P1_London_28_IMP_1_04_05_02570	conjugative transfer region protein
P1_London_28_IMP_1_04_05_02571	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02572	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02573	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02574	conjugative transfer region lipoprotein
P1_London_28_IMP_1_04_05_02575	type IV secretion system ATPase VirB4
P1_London_28_IMP_1_04_05_02576	Protein-disulfide isomerase
P1_London_28_IMP_1_04_05_02577	DNA repair protein RadC



P1_London_28_IMP_1_04_05_02578	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02579	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02580	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_02581	hypothetical protein
P1_London_28_IMP_1_04_05_02582	hypothetical protein
P1_London_28_IMP_1_04_05_02583	hypothetical protein
P1_London_28_IMP_1_04_05_02584	Toxin YhaV
P1_London_28_IMP_1_04_05_02585	putative regulator PrIF
P1_London_28_IMP_1_04_05_02586	integrating conjugative element relaxase%2C PFGI-1 class
P1_London_28_IMP_1_04_05_02587	DNA-binding transcriptional activator GcvA
P1_London_28_IMP_1_04_05_02588	Putative prophage CPS-53 integrase
P1_London_28_IMP_1_04_05_02797	hypothetical protein
P1_London_28_IMP_1_04_05_02798	hypothetical protein
P1_London_28_IMP_1_04_05_02799	hypothetical protein
P1_London_28_IMP_1_04_05_02800	hypothetical protein
P1_London_28_IMP_1_04_05_02801	hypothetical protein
P1_London_28_IMP_1_04_05_02803	hypothetical protein
P1_London_28_IMP_1_04_05_02804	Helix-turn-helix
P1_London_28_IMP_1_04_05_02805	integrase
P1_London_28_IMP_1_04_05_02806	hypothetical protein
P1_London_28_IMP_1_04_05_02807	Nuclease-related domain protein
P1_London_28_IMP_1_04_05_02808	putative transposase OrfB
P1_London_28_IMP_1_04_05_02809	Transposase
P1_London_28_IMP_1_04_05_02810	hypothetical protein
P1_London_28_IMP_1_04_05_02811	Site-specific recombinase XerD
P1_London_28_IMP_1_04_05_02812	Site-specific recombinase XerD
P1_London_28_IMP_1_04_05_02813	Tyrosine recombinase XerC

P1_London_28_IMP_1_04_05_02814	integrase
P1_London_28_IMP_1_04_05_02815	hypothetical protein
P1_London_28_IMP_1_04_05_02816	hypothetical protein
P1_London_28_IMP_1_04_05_02817	hypothetical protein
P1_London_28_IMP_1_04_05_02818	Transposase%2C IS30 family
P1_London_28_IMP_1_04_05_02819	hypothetical protein
P1_London_28_IMP_1_04_05_02820	Ribbon-helix-helix protein%2C copG family
P1_London_28_IMP_1_04_05_02821	Plasmid stabilisation system protein
P1_London_28_IMP_1_04_05_02822	hypothetical protein
P1_London_28_IMP_1_04_05_02823	Site-specific recombinase XerC
P1_London_28_IMP_1_04_05_02824	Site-specific recombinase XerC
P1_London_28_IMP_1_04_05_02825	Tyrosine recombinase XerC
P1_London_28_IMP_1_04_05_02826	hypothetical protein
P1_London_28_IMP_1_04_05_02827	Twitching mobility protein
P1_London_28_IMP_1_04_05_02828	hypothetical protein
P1_London_28_IMP_1_04_05_02829	TCP pilus biosynthesis protein TcpE
P1_London_28_IMP_1_04_05_02830	Type II traffic warden ATPase
P1_London_28_IMP_1_04_05_02831	type IV pilus biogenesis protein PilP
P1_London_28_IMP_1_04_05_02832	Pilin accessory protein (PilO)
P1_London_28_IMP_1_04_05_02833	Bundle-forming pilus B
P1_London_28_IMP_1_04_05_02834	Toxin co-regulated pilus biosynthesis protein Q
P1_London_28_IMP_1_04_05_02835	plasmid segregation protein ParM
P1_London_28_IMP_1_04_05_02836	hypothetical protein
P1_London_28_IMP_1_04_05_02837	Twitching mobility protein
P1_London_28_IMP_1_04_05_02838	hypothetical protein
P1_London_28_IMP_1_04_05_02839	hypothetical protein
P1_London_28_IMP_1_04_05_02840	hypothetical protein

P1_London_28_IMP_1_04_05_02841	hypothetical protein
P1_London_28_IMP_1_04_05_02842	hypothetical protein
P1_London_28_IMP_1_04_05_02843	hypothetical protein
P1_London_28_IMP_1_04_05_02844	hypothetical protein
P1_London_28_IMP_1_04_05_02845	hypothetical protein
P1_London_28_IMP_1_04_05_02846	hypothetical protein
P1_London_28_IMP_1_04_05_02847	hypothetical protein
P1_London_28_IMP_1_04_05_02848	hypothetical protein
P1_London_28_IMP_1_04_05_02849	Sporulation initiation inhibitor protein soj
P1_London_28_IMP_1_04_05_02850	Nucleoid occlusion protein
P1_London_28_IMP_1_04_05_02851	Protein involved in initiation of plasmid replication
P1_London_28_IMP_1_04_05_02852	hypothetical protein
P1_London_28_IMP_1_04_05_02853	hypothetical protein
P1_London_28_IMP_1_04_05_02854	Macrophage killing protein with similarity to conjugation protein
P1_London_28_IMP_1_04_05_02855	hypothetical protein
P1_London_28_IMP_1_04_05_02856	Type IV secretory pathway%2C VirB10 components
P1_London_28_IMP_1_04_05_02857	hypothetical protein
P1_London_28_IMP_1_04_05_02858	hypothetical protein
P1_London_28_IMP_1_04_05_02859	hypothetical protein
P1_London_28_IMP_1_04_05_02860	hypothetical protein
P1_London_28_IMP_1_04_05_02861	hypothetical protein
P1_London_28_IMP_1_04_05_02862	hypothetical protein
P1_London_28_IMP_1_04_05_02863	Type IV secretory pathway%2C VirB4 components
P1_London_28_IMP_1_04_05_02864	hypothetical protein
P1_London_28_IMP_1_04_05_02865	hypothetical protein
P1_London_28_IMP_1_04_05_02866	hypothetical protein
P1_London_28_IMP_1_04_05_02867	hypothetical protein

P1_London_28_IMP_1_04_05_02868	hypothetical protein
P1_London_28_IMP_1_04_05_03754	hypothetical protein
P1_London_28_IMP_1_04_05_03755	integrating conjugative element protein PILL%2C PFGI-1 class
P1_London_28_IMP_1_04_05_03757	hypothetical protein
P1_London_28_IMP_1_04_05_03758	hypothetical protein
P1_London_28_IMP_1_04_05_03759	hypothetical protein
P1_London_28_IMP_1_04_05_03760	hypothetical protein
P1_London_28_IMP_1_04_05_03761	hypothetical protein
P1_London_28_IMP_1_04_05_03762	hypothetical protein
P1_London_28_IMP_1_04_05_03764	PUA domain (predicted RNA-binding domain)
P1_London_28_IMP_1_04_05_03765	hypothetical protein
P1_London_28_IMP_1_04_05_03766	hypothetical protein
P1_London_28_IMP_1_04_05_03767	hypothetical protein
P1_London_28_IMP_1_04_05_03768	hypothetical protein
P1_London_28_IMP_1_04_05_03769	hypothetical protein
P1_London_28_IMP_1_04_05_03770	hypothetical protein
P1_London_28_IMP_1_04_05_03772	single-stranded DNA-binding protein
P1_London_28_IMP_1_04_05_03773	hypothetical protein
P1_London_28_IMP_1_04_05_03774	integrating conjugative element protein%2C family
P1_London_28_IMP_1_04_05_03775	hypothetical protein
P1_London_28_IMP_1_04_05_03777	integrating conjugative element%2C PFGI_1 class%2C ParB family protein
P1_London_28_IMP_1_04_05_03778	hypothetical protein
P1_London_28_IMP_1_04_05_03781	hypothetical protein
P1_London_28_IMP_1_04_05_03782	Hca operon transcriptional activator
P1_London_28_IMP_1_04_05_03783	Transposase
P1_London_28_IMP_1_04_05_03784	Transposase
P1_London_28_IMP_1_04_05_03785	hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_03796 K(+)/H(+) antiporter

P1\_London\_28\_IMP\_1\_04\_05\_03797 putative membrane protein

P1\_London\_28\_IMP\_1\_04\_05\_03798 hypothetical protein

P1\_London\_28\_IMP\_1\_04\_05\_03799 Periplasmic serine endoprotease DegP precursor

P1\_London\_28\_IMP\_1\_04\_05\_03800 Hca operon transcriptional activator

P1\_London\_28\_IMP\_1\_04\_05\_03839 integrating conjugative element protein%2C family

P1\_London\_28\_IMP\_1\_04\_05\_03859 Beta-lactamase IMP-1 precursor

P1\_London\_28\_IMP\_1\_04\_05\_04100 conjugal transfer pilin processing protease TraF

P1\_London\_28\_IMP\_1\_04\_05\_05760 putative addiction module killer protein

P1\_London\_28\_IMP\_1\_04\_05\_05761 putative addiction module antidote protein

P2\_London\_28\_IMP\_1\_06\_05\_01198 Porin D precursor

P2\_London\_28\_IMP\_1\_06\_05\_01351 hypothetical protein

P2\_London\_28\_IMP\_1\_06\_05\_03270 integrating conjugative element protein%2C family

P2\_London\_28\_IMP\_1\_06\_05\_03586 transfer-messenger RNA%2C SsrA

P41\_London\_28\_09\_12\_00634 hypothetical protein

P41\_London\_28\_09\_12\_00638 SEC-C motif

P41\_London\_28\_09\_12\_04759 tape measure domain protein

P41\_London\_28\_09\_12\_04896 phage protein%2C HK97 gp10 family

P41\_London\_28\_09\_12\_04913 hypothetical protein

P41\_London\_28\_09\_12\_04929 hypothetical protein

P41\_London\_28\_09\_12\_04930 putative HTH-type transcriptional regulator

P41\_London\_28\_09\_12\_04933 hypothetical protein

P41\_London\_28\_09\_12\_06129 Bacteriophytochrome cph2

P41\_London\_28\_09\_12\_06607 Modification methylase MbolI

P41\_London\_28\_09\_12\_06609 tRNA-Ser(cga)

P41\_London\_28\_09\_12\_06610 hypothetical protein

P41\_London\_28\_09\_12\_06627 Group II intron-encoded protein LtrA

P41\_London\_28\_09\_12\_06631 hypothetical protein

P41\_London\_28\_09\_12\_06636 OST-HTH/LOTUS domain protein

P41\_London\_28\_09\_12\_06646 Transposase DDE domain protein

P41\_London\_28\_09\_12\_06647 Transposase DDE domain protein

P4\_London\_1\_VIM\_2\_10\_07\_02142 IS1 transposase

P4\_London\_1\_VIM\_2\_10\_07\_02143 hypothetical protein

P4\_London\_1\_VIM\_2\_10\_07\_02372 Membrane dipeptidase (Peptidase family M19)

P4\_London\_1\_VIM\_2\_10\_07\_02965 Phosphate regulon transcriptional regulatory protein PhoB

P4\_London\_1\_VIM\_2\_10\_07\_03029 Sulfurtransferase TusA

P4\_London\_1\_VIM\_2\_10\_07\_03167 putative MFS-type transporter YhjX

P60\_London\_6\_VIM\_2\_11\_13\_00216 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00217 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00218 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00219 Mu-like prophage I protein

P60\_London\_6\_VIM\_2\_11\_13\_00490 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00491 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00492 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00906 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00907 putative HTH-type transcriptional regulator

P60\_London\_6\_VIM\_2\_11\_13\_00908 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_00911 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04059 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04060 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04061 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04064 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04067 Ice nucleation protein

P60\_London\_6\_VIM\_2\_11\_13\_04068 SPFH domain / Band 7 family protein

P60\_London\_6\_VIM\_2\_11\_13\_04069 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04072 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04073 Pyocin repressor protein

P60\_London\_6\_VIM\_2\_11\_13\_04074 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04076 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04078 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04079 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04080 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04081 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04082 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04117 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_04119 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06590 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06593 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06594 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06595 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06597 putative secretion ATPase%2C PEP-CTERM locus subfamily

P60\_London\_6\_VIM\_2\_11\_13\_06598 Integrase core domain protein

P60\_London\_6\_VIM\_2\_11\_13\_06599 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06600 putative transcriptional regulator

P60\_London\_6\_VIM\_2\_11\_13\_06601 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06602 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06603 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06604 phage-associated protein%2C BcepMu gp16 family

P60\_London\_6\_VIM\_2\_11\_13\_06605 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06606 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06629 hypothetical protein

P60\_London\_6\_VIM\_2\_11\_13\_06634 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_00489 DNA-invertase hin

P19\_London\_7\_VIM\_2\_05\_10\_00490 Type I restriction enzyme EcoKI M protein

P19\_London\_7\_VIM\_2\_05\_10\_00491 EcoKI restriction-modification system protein HsdS

P19\_London\_7\_VIM\_2\_05\_10\_00492 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_00493 Type-1 restriction enzyme R protein

P19\_London\_7\_VIM\_2\_05\_10\_00494 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_00495 GIY-YIG nuclease superfamily protein

P19\_London\_7\_VIM\_2\_05\_10\_00496 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_00497 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_00498 Tyrosine recombinase XerD

P19\_London\_7\_VIM\_2\_05\_10\_01300 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01314 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01315 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01316 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01317 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01318 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01319 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01320 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01540 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01541 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_01557 Beta-lactamase IMP-1 precursor

P19\_London\_7\_VIM\_2\_05\_10\_01558 Beta-lactamase OXA-2 precursor

P19\_London\_7\_VIM\_2\_05\_10\_01659 Chromosomal replication initiator protein DnaA

P19\_London\_7\_VIM\_2\_05\_10\_01660 Integrase core domain protein

P19\_London\_7\_VIM\_2\_05\_10\_02128 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_04126 putative HTH-type transcriptional regulator



P19_London_7_VIM_2_05_10_04127	hypothetical protein
P19_London_7_VIM_2_05_10_04285	hypothetical protein
P19_London_7_VIM_2_05_10_04305	Phage DNA packaging protein Nu1
P19_London_7_VIM_2_05_10_04306	Phage terminase large subunit (GpA)
P19_London_7_VIM_2_05_10_04315	hypothetical protein
P19_London_7_VIM_2_05_10_04320	hypothetical protein
P19_London_7_VIM_2_05_10_04321	hypothetical protein
P19_London_7_VIM_2_05_10_05039	hypothetical protein
P19_London_7_VIM_2_05_10_05043	hypothetical protein
P19_London_7_VIM_2_05_10_05044	DNA primase TraC
P19_London_7_VIM_2_05_10_05059	PilM
P19_London_7_VIM_2_05_10_05060	hypothetical protein
P19_London_7_VIM_2_05_10_05061	hypothetical protein
P19_London_7_VIM_2_05_10_05062	hypothetical protein
P19_London_7_VIM_2_05_10_05063	hypothetical protein
P19_London_7_VIM_2_05_10_05064	hypothetical protein
P19_London_7_VIM_2_05_10_05065	ATP-dependent DNA helicase DinG
P19_London_7_VIM_2_05_10_05066	hypothetical protein
P19_London_7_VIM_2_05_10_05067	hypothetical protein
P19_London_7_VIM_2_05_10_05068	hypothetical protein
P19_London_7_VIM_2_05_10_05069	hypothetical protein
P19_London_7_VIM_2_05_10_05070	hypothetical protein
P19_London_7_VIM_2_05_10_05071	hypothetical protein
P19_London_7_VIM_2_05_10_05072	hypothetical protein
P19_London_7_VIM_2_05_10_05073	hypothetical protein
P19_London_7_VIM_2_05_10_05076	hypothetical protein
P19_London_7_VIM_2_05_10_05077	hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05079 O-acetyltransferase OatA

P19\_London\_7\_VIM\_2\_05\_10\_05080 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05081 Twitching mobility protein

P19\_London\_7\_VIM\_2\_05\_10\_05082 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05083 Toxin coregulated pilus biosynthesis protein E

P19\_London\_7\_VIM\_2\_05\_10\_05084 Type II secretion system protein E

P19\_London\_7\_VIM\_2\_05\_10\_05085 Type IV pilus biogenesis

P19\_London\_7\_VIM\_2\_05\_10\_05086 Pilin accessory protein (PilO)

P19\_London\_7\_VIM\_2\_05\_10\_05087 Outer membrane lipoprotein BfpB precursor

P19\_London\_7\_VIM\_2\_05\_10\_05088 Toxin co-regulated pilus biosynthesis protein Q

P19\_London\_7\_VIM\_2\_05\_10\_05090 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05091 Twitching mobility protein

P19\_London\_7\_VIM\_2\_05\_10\_05092 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05100 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05104 Nucleoid occlusion protein

P19\_London\_7\_VIM\_2\_05\_10\_05105 Initiator Replication protein

P19\_London\_7\_VIM\_2\_05\_10\_05106 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05110 Bacterial conjugation TrbI-like protein

P19\_London\_7\_VIM\_2\_05\_10\_05111 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05114 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05115 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05116 AAA-like domain protein

P19\_London\_7\_VIM\_2\_05\_10\_05117 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05118 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05121 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05122 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05123 hypothetical protein

P19_London_7_VIM_2_05_10_05124	hypothetical protein
P19_London_7_VIM_2_05_10_05125	hypothetical protein
P19_London_7_VIM_2_05_10_05129	hypothetical protein
P19_London_7_VIM_2_05_10_05131	hypothetical protein
P19_London_7_VIM_2_05_10_05137	Tyrosine recombinase XerC
P19_London_7_VIM_2_05_10_05138	Abi-like protein
P19_London_7_VIM_2_05_10_05139	hypothetical protein
P19_London_7_VIM_2_05_10_05140	hypothetical protein
P19_London_7_VIM_2_05_10_05141	hypothetical protein
P19_London_7_VIM_2_05_10_05142	hypothetical protein
P19_London_7_VIM_2_05_10_05143	hypothetical protein
P19_London_7_VIM_2_05_10_05144	hypothetical protein
P19_London_7_VIM_2_05_10_05145	hypothetical protein
P19_London_7_VIM_2_05_10_05146	hypothetical protein
P19_London_7_VIM_2_05_10_05147	hypothetical protein
P19_London_7_VIM_2_05_10_05148	hypothetical protein
P19_London_7_VIM_2_05_10_05149	hypothetical protein
P19_London_7_VIM_2_05_10_05150	hypothetical protein
P19_London_7_VIM_2_05_10_05153	hypothetical protein
P19_London_7_VIM_2_05_10_05154	Replicative DNA helicase
P19_London_7_VIM_2_05_10_05156	hypothetical protein
P19_London_7_VIM_2_05_10_05157	hypothetical protein
P19_London_7_VIM_2_05_10_05158	Outer membrane protein P1 precursor
P19_London_7_VIM_2_05_10_05159	Integrase core domain protein
P19_London_7_VIM_2_05_10_05160	Transposase IS66 family protein
P19_London_7_VIM_2_05_10_05161	IS66 Orf2 like protein
P19_London_7_VIM_2_05_10_05162	Antitoxin DinJ

P19\_London\_7\_VIM\_2\_05\_10\_05163 mRNA interferase YafQ

P19\_London\_7\_VIM\_2\_05\_10\_05164 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05171 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05172 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05173 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05180 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05182 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05567 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05568 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05569 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05570 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05571 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05572 Putative type II secretion system protein F

P19\_London\_7\_VIM\_2\_05\_10\_05573 Putative type II secretion system protein E

P19\_London\_7\_VIM\_2\_05\_10\_05574 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05575 putative major pilin subunit

P19\_London\_7\_VIM\_2\_05\_10\_05576 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05577 Chromosome partition protein Smc

P19\_London\_7\_VIM\_2\_05\_10\_05578 Tyrosine recombinase XerC

P19\_London\_7\_VIM\_2\_05\_10\_05579 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05580 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05581 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05582 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05583 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05584 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05585 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05586 Twitching mobility protein

P19_London_7_VIM_2_05_10_05587	hypothetical protein
P19_London_7_VIM_2_05_10_05588	hypothetical protein
P19_London_7_VIM_2_05_10_05589	hypothetical protein
P19_London_7_VIM_2_05_10_05590	DNA topoisomerase 1
P19_London_7_VIM_2_05_10_05591	hypothetical protein
P19_London_7_VIM_2_05_10_05592	hypothetical protein
P19_London_7_VIM_2_05_10_05593	Bacterial type II and III secretion system protein
P19_London_7_VIM_2_05_10_05594	hypothetical protein
P19_London_7_VIM_2_05_10_05595	Macrophage killing protein with similarity to conjugation protein
P19_London_7_VIM_2_05_10_05596	hypothetical protein
P19_London_7_VIM_2_05_10_05597	Plasmid segregation protein ParM
P19_London_7_VIM_2_05_10_05598	hypothetical protein
P19_London_7_VIM_2_05_10_05599	hypothetical protein
P19_London_7_VIM_2_05_10_05600	Type IV secretion-system coupling protein DNA-binding domain protein
P19_London_7_VIM_2_05_10_05601	hypothetical protein
P19_London_7_VIM_2_05_10_05602	hypothetical protein
P19_London_7_VIM_2_05_10_05603	hypothetical protein
P19_London_7_VIM_2_05_10_05604	hypothetical protein
P19_London_7_VIM_2_05_10_05605	hypothetical protein
P19_London_7_VIM_2_05_10_05606	hypothetical protein
P19_London_7_VIM_2_05_10_05607	hypothetical protein
P19_London_7_VIM_2_05_10_05608	hypothetical protein
P19_London_7_VIM_2_05_10_05609	Bacterial conjugation TrbI-like protein
P19_London_7_VIM_2_05_10_05610	hypothetical protein
P19_London_7_VIM_2_05_10_05611	hypothetical protein
P19_London_7_VIM_2_05_10_05612	AAA-like domain protein

P19\_London\_7\_VIM\_2\_05\_10\_05613 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05614 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05615 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05616 Elongation factor Ts%2C mitochondrial

P19\_London\_7\_VIM\_2\_05\_10\_05617 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05618 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05619 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05620 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05621 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05622 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05623 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05624 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05626 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05627 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05628 DNA topoisomerase 3

P19\_London\_7\_VIM\_2\_05\_10\_05629 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05630 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05631 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05632 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05633 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05634 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05635 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05636 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05637 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05638 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05639 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05640 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05641 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05642 Transglycosylase SLT domain protein

P19\_London\_7\_VIM\_2\_05\_10\_05643 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05644 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05645 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05646 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05647 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05648 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05649 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05650 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05651 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05652 putative chromosome-partitioning protein ParB

P19\_London\_7\_VIM\_2\_05\_10\_05653 Cyclic di-GMP phosphodiesterase YfgF

P19\_London\_7\_VIM\_2\_05\_10\_05654 Primosomal protein N'

P19\_London\_7\_VIM\_2\_05\_10\_05655 ATP-dependent DNA helicase PcrA

P19\_London\_7\_VIM\_2\_05\_10\_05656 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05657 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05658 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05659 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05660 Recombination-associated protein RdgC

P19\_London\_7\_VIM\_2\_05\_10\_05661 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05662 hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_05663 Serine/threonine-protein phosphatase 1

P19\_London\_7\_VIM\_2\_05\_10\_05664 Peptidase M15

P19\_London\_7\_VIM\_2\_05\_10\_05665 Mercuric resistance operon regulatory protein

P19\_London\_7\_VIM\_2\_05\_10\_05666 MerT mercuric transport protein

P19\_London\_7\_VIM\_2\_05\_10\_05667 Mercuric transport protein periplasmic component precursor

P19_London_7_VIM_2_05_10_05668	hypothetical protein
P19_London_7_VIM_2_05_10_05669	Tn3 transposase DDE domain protein
P19_London_7_VIM_2_05_10_05670	PIN domain protein
P19_London_7_VIM_2_05_10_05671	hypothetical protein
P19_London_7_VIM_2_05_10_05672	DNA-invertase hin
P19_London_7_VIM_2_05_10_05673	hypothetical protein
P19_London_7_VIM_2_05_10_05674	hypothetical protein
P19_London_7_VIM_2_05_10_05675	hypothetical protein
P19_London_7_VIM_2_05_10_05676	hypothetical protein
P19_London_7_VIM_2_05_10_05677	hypothetical protein
P19_London_7_VIM_2_05_10_05678	Antitoxin HigA
P19_London_7_VIM_2_05_10_05679	hypothetical protein
P19_London_7_VIM_2_05_10_05680	hypothetical protein
P19_London_7_VIM_2_05_10_05681	hypothetical protein
P19_London_7_VIM_2_05_10_05682	hypothetical protein
P19_London_7_VIM_2_05_10_05683	hypothetical protein
P19_London_7_VIM_2_05_10_05684	hypothetical protein
P19_London_7_VIM_2_05_10_05685	hypothetical protein
P19_London_7_VIM_2_05_10_05686	hypothetical protein
P19_London_7_VIM_2_05_10_05687	hypothetical protein
P19_London_7_VIM_2_05_10_05688	hypothetical protein
P19_London_7_VIM_2_05_10_05689	hypothetical protein
P19_London_7_VIM_2_05_10_05690	hypothetical protein
P19_London_7_VIM_2_05_10_05691	hypothetical protein
P19_London_7_VIM_2_05_10_05692	hypothetical protein
P19_London_7_VIM_2_05_10_05693	C-5 cytosine-specific DNA methylase
P19_London_7_VIM_2_05_10_05694	hypothetical protein



P19_London_7_VIM_2_05_10_05695	N-6 DNA Methylase
P19_London_7_VIM_2_05_10_05696	hypothetical protein
P19_London_7_VIM_2_05_10_05697	hypothetical protein
P19_London_7_VIM_2_05_10_05698	hypothetical protein
P19_London_7_VIM_2_05_10_05699	hypothetical protein
P19_London_7_VIM_2_05_10_05700	hypothetical protein
P19_London_7_VIM_2_05_10_05701	hypothetical protein
P19_London_7_VIM_2_05_10_05702	hypothetical protein
P19_London_7_VIM_2_05_10_05703	Phage protein Gp37/Gp68
P19_London_7_VIM_2_05_10_05704	hypothetical protein
P19_London_7_VIM_2_05_10_05705	hypothetical protein
P19_London_7_VIM_2_05_10_05706	Nucleoid-associated protein YejK
P19_London_7_VIM_2_05_10_05707	RNA polymerase-binding transcription factor DksA
P19_London_7_VIM_2_05_10_05708	hypothetical protein
P19_London_7_VIM_2_05_10_05709	hypothetical protein
P19_London_7_VIM_2_05_10_05710	RNA polymerase-associated protein RapA
P19_London_7_VIM_2_05_10_05711	hypothetical protein
P19_London_7_VIM_2_05_10_05712	hypothetical protein
P19_London_7_VIM_2_05_10_05713	hypothetical protein
P19_London_7_VIM_2_05_10_05714	hypothetical protein
P19_London_7_VIM_2_05_10_05715	hypothetical protein
P19_London_7_VIM_2_05_10_05716	Chromosome partition protein Smc
P19_London_7_VIM_2_05_10_05717	hypothetical protein
P19_London_7_VIM_2_05_10_05718	hypothetical protein
P19_London_7_VIM_2_05_10_05719	hypothetical protein
P19_London_7_VIM_2_05_10_05720	hypothetical protein
P19_London_7_VIM_2_05_10_05721	hypothetical protein

P19_London_7_VIM_2_05_10_05722	hypothetical protein
P19_London_7_VIM_2_05_10_05723	hypothetical protein
P19_London_7_VIM_2_05_10_05724	hypothetical protein
P19_London_7_VIM_2_05_10_05786	hypothetical protein
P19_London_7_VIM_2_05_10_05787	hypothetical protein
P19_London_7_VIM_2_05_10_05788	hypothetical protein
P19_London_7_VIM_2_05_10_05789	LexA repressor
P19_London_7_VIM_2_05_10_05790	hypothetical protein
P19_London_7_VIM_2_05_10_05791	hypothetical protein
P19_London_7_VIM_2_05_10_05792	hypothetical protein
P19_London_7_VIM_2_05_10_05793	hypothetical protein
P19_London_7_VIM_2_05_10_05794	Phage antitermination protein Q
P19_London_7_VIM_2_05_10_05795	hypothetical protein
P19_London_7_VIM_2_05_10_05796	hypothetical protein
P19_London_7_VIM_2_05_10_05797	hypothetical protein
P19_London_7_VIM_2_05_10_05798	Lysozyme RrrD
P19_London_7_VIM_2_05_10_05799	hypothetical protein
P19_London_7_VIM_2_05_10_05800	hypothetical protein
P19_London_7_VIM_2_05_10_05801	Phage DNA packaging protein Nu1
P19_London_7_VIM_2_05_10_05802	Phage terminase large subunit (GpA)
P19_London_7_VIM_2_05_10_05803	hypothetical protein
P19_London_7_VIM_2_05_10_05804	Phage portal protein%2C lambda family
P19_London_7_VIM_2_05_10_05805	Phage capsid family protein
P19_London_7_VIM_2_05_10_05806	hypothetical protein
P19_London_7_VIM_2_05_10_05807	hypothetical protein
P19_London_7_VIM_2_05_10_05808	hypothetical protein
P19_London_7_VIM_2_05_10_05809	hypothetical protein

P19_London_7_VIM_2_05_10_05810	Phage-related baseplate assembly protein
P19_London_7_VIM_2_05_10_05811	hypothetical protein
P19_London_7_VIM_2_05_10_05812	Baseplate J-like protein
P19_London_7_VIM_2_05_10_05813	Phage tail protein (Tail_P2_I)
P19_London_7_VIM_2_05_10_05814	hypothetical protein
P19_London_7_VIM_2_05_10_05815	hypothetical protein
P19_London_7_VIM_2_05_10_05816	hypothetical protein
P19_London_7_VIM_2_05_10_05817	hypothetical protein
P19_London_7_VIM_2_05_10_05818	hypothetical protein
P19_London_7_VIM_2_05_10_05819	Phage tail tube protein FII
P19_London_7_VIM_2_05_10_05820	hypothetical protein
P19_London_7_VIM_2_05_10_05821	hypothetical protein
P19_London_7_VIM_2_05_10_05822	Chromosome partition protein Smc
P19_London_7_VIM_2_05_10_05823	Phage P2 GpU
P19_London_7_VIM_2_05_10_05824	Phage Tail Protein X
P19_London_7_VIM_2_05_10_05825	Phage late control gene D protein (GPD)
P19_London_7_VIM_2_05_10_05826	hypothetical protein
P19_London_7_VIM_2_05_10_05827	Exodeoxyribonuclease 10
P19_London_7_VIM_2_05_10_05828	Modification methylase Hhal
P19_London_7_VIM_2_05_10_05829	hypothetical protein
P19_London_7_VIM_2_05_10_05830	hypothetical protein
P19_London_7_VIM_2_05_10_05831	hypothetical protein
P19_London_7_VIM_2_05_10_05832	hypothetical protein
P19_London_7_VIM_2_05_10_05833	Sporulation initiation inhibitor protein Soj
P19_London_7_VIM_2_05_10_06777	Tyrosine recombinase XerC
P19_London_7_VIM_2_05_10_06778	Helix-turn-helix
P19_London_7_VIM_2_05_10_06779	hypothetical protein

P19_London_7_VIM_2_05_10_06780	exonuclease VIII
P19_London_7_VIM_2_05_10_06781	hypothetical protein
P19_London_7_VIM_2_05_10_06782	hypothetical protein
P19_London_7_VIM_2_05_10_06783	Plasmid replication initiator protein TrfA
P19_London_7_VIM_2_05_10_06784	hypothetical protein
P19_London_7_VIM_2_05_10_06785	hypothetical protein
P19_London_7_VIM_2_05_10_06786	hypothetical protein
P19_London_7_VIM_2_05_10_06787	hypothetical protein
P19_London_7_VIM_2_05_10_06788	hypothetical protein
P19_London_7_VIM_2_05_10_06789	hypothetical protein
P19_London_7_VIM_2_05_10_06790	hypothetical protein
P19_London_7_VIM_2_05_10_06791	Modification methylase PvuII
P19_London_7_VIM_2_05_10_06792	hypothetical protein
P19_London_7_VIM_2_05_10_06793	hypothetical protein
P19_London_7_VIM_2_05_10_06794	hypothetical protein
P19_London_7_VIM_2_05_10_06795	hypothetical protein
P19_London_7_VIM_2_05_10_06796	hypothetical protein
P19_London_7_VIM_2_05_10_06797	hypothetical protein
P19_London_7_VIM_2_05_10_06798	hypothetical protein
P19_London_7_VIM_2_05_10_06799	hypothetical protein
P19_London_7_VIM_2_05_10_06800	hypothetical protein
P19_London_7_VIM_2_05_10_06801	hypothetical protein
P19_London_7_VIM_2_05_10_06802	hypothetical protein
P19_London_7_VIM_2_05_10_06803	hypothetical protein
P19_London_7_VIM_2_05_10_06804	hypothetical protein
P19_London_7_VIM_2_05_10_06805	hypothetical protein
P19_London_7_VIM_2_05_10_06806	hypothetical protein

P19\_London\_7\_VIM\_2\_05\_10\_06807 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00602 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00604 phage tail tape measure protein%2C lambda family

P49\_London\_7\_VIM\_2\_01\_13\_00605 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00606 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00607 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00608 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00609 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00610 Mu-like prophage protein gp36

P49\_London\_7\_VIM\_2\_01\_13\_00611 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00612 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00613 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00614 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00615 Mu-like prophage I protein

P49\_London\_7\_VIM\_2\_01\_13\_00616 phage virion morphogenesis protein

P49\_London\_7\_VIM\_2\_01\_13\_00617 Phage Mu protein F like protein

P49\_London\_7\_VIM\_2\_01\_13\_00618 Mu-like prophage protein gp29

P49\_London\_7\_VIM\_2\_01\_13\_00619 Mu-like prophage FluMu protein gp28

P49\_London\_7\_VIM\_2\_01\_13\_00620 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00621 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00622 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00623 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00645 Mu-like prophage protein gp16

P49\_London\_7\_VIM\_2\_01\_13\_00646 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00991 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00992 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00998 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_00999 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_01000 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_01001 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_02001 putative acetyltransferase

P49\_London\_7\_VIM\_2\_01\_13\_02968 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_02969 hypothetical protein

P49\_London\_7\_VIM\_2\_01\_13\_04015 putative methyltransferase

P51\_1\_London\_9\_VIM\_2\_02\_13\_00484hypothetical protein

P53\_London\_9\_VIM\_2\_02\_13\_03302 hypothetical protein

P53\_London\_9\_VIM\_2\_02\_13\_05893 Cro

P47\_London\_12\_VIM\_2\_12\_12\_02345 p120

P56\_London\_12\_VIM\_2\_07\_13\_00907 DNA-binding transcriptional regulator DicC

P56\_London\_12\_VIM\_2\_07\_13\_00908 Pyocin repressor protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_01411 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_01930 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_01931 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_01932 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_03056 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_03075 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_04977 hypothetical protein

P54\_1\_London\_24\_VIM\_2\_04\_13\_04994 integrating conjugative element protein%2C family

P54\_2\_London\_24\_VIM\_2\_04\_13\_01497 Transposase DDE domain protein

P54\_2\_London\_24\_VIM\_2\_04\_13\_02166 hypothetical protein

P54\_2\_London\_24\_VIM\_2\_04\_13\_02324 hypothetical protein

P63\_London\_25\_VIM\_2\_03\_14\_02417 hypothetical protein

E7\_London\_26\_VIM\_2\_06\_13\_00239 hypothetical protein

P52\_1\_London\_26\_VIM\_2\_02\_13\_05932 Outer membrane protein OprM precursor

P58\_London\_29\_09\_13\_03253 hypothetical protein

P58\_London\_29\_09\_13\_03255 DNA-binding transcriptional regulator Nlp

P39\_London\_29\_08\_12\_01071 hypothetical protein

P39\_London\_29\_08\_12\_01118 hypothetical protein

P39\_London\_29\_08\_12\_02780 Helix-turn-helix

P39\_London\_29\_08\_12\_02781 hypothetical protein

P39\_London\_29\_08\_12\_02782 DNA primase

P39\_London\_29\_08\_12\_02783 hypothetical protein

P39\_London\_29\_08\_12\_02784 hypothetical protein

P39\_London\_29\_08\_12\_02785 hypothetical protein

P39\_London\_29\_08\_12\_02786 hypothetical protein

P39\_London\_29\_08\_12\_02787 Arc-like DNA binding domain protein

P39\_London\_29\_08\_12\_02788 hypothetical protein

P39\_London\_29\_08\_12\_02789 hypothetical protein

P39\_London\_29\_08\_12\_02790 hypothetical protein

P6\_EastofEngland\_6\_IMP\_1\_03\_09\_02301 DNA topoisomerase 3

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00061 Modification methylase Hhal

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00062 hypothetical protein

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00063 hypothetical protein

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00064 Growth regulator

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00065 hypothetical protein

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00066 Periplasmic serine endoprotease DegP precursor

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00067 hypothetical protein

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00068 hypothetical protein

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00069 DNA strand transferase

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00070 conjugal transfer protein TraC

P9\_EastofEngland\_6\_IMP\_13\_08\_09\_00071 Conjugal transfer protein TraG

P9_EastofEngland_6_IMP_13_08_09_00072	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00073	chromosome segregation protein SMC
P9_EastofEngland_6_IMP_13_08_09_00074	Plasmid encoded RepA protein
P9_EastofEngland_6_IMP_13_08_09_00075	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00076	Sporulation initiation inhibitor protein soj
P9_EastofEngland_6_IMP_13_08_09_00077	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00078	DNA-invertase hin
P9_EastofEngland_6_IMP_13_08_09_00079	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00080	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00081	hypothetical protein
P9_EastofEngland_6_IMP_13_08_09_00082	DNA-invertase hin
P9_EastofEngland_6_IMP_13_08_09_01969	Beta-lactamase OXA-10 precursor
P9_EastofEngland_6_IMP_13_08_09_01970	Beta-lactamase IMP-1 precursor
P64_EastofEngland_6_01_14_01171	hypothetical protein
P64_EastofEngland_6_01_14_01172	hypothetical protein
P64_EastofEngland_6_01_14_01173	hypothetical protein
P64_EastofEngland_6_01_14_01404	IS66 Orf2 like protein
P64_EastofEngland_6_01_14_01405	Transposase
P64_EastofEngland_6_01_14_01409	Antitoxin VapB
P64_EastofEngland_6_01_14_01410	tRNA(fMet)-specific endonuclease VapC
P64_EastofEngland_6_01_14_01411	hypothetical protein
P64_EastofEngland_6_01_14_01412	hypothetical protein
P64_EastofEngland_6_01_14_01413	hypothetical protein
P64_EastofEngland_6_01_14_01950	hypothetical protein
P64_EastofEngland_6_01_14_01954	Major cold shock protein CspA
P64_EastofEngland_6_01_14_02131	hypothetical protein
P64_EastofEngland_6_01_14_02214	hypothetical protein



P64_EastofEngland_6_01_14_02516	hypothetical protein
P64_EastofEngland_6_01_14_02658	hypothetical protein
P64_EastofEngland_6_01_14_02659	ATP-dependent RNA helicase RhIE
P64_EastofEngland_6_01_14_02660	hypothetical protein
P64_EastofEngland_6_01_14_02661	Tellurite resistance protein
P64_EastofEngland_6_01_14_02663	Tyrosine recombinase XerC
P8_1_SouthEast_10_VIM_2_07_09_05038	hypothetical protein
P30_SouthEast_2_VIM_2_10_11_04041	hypothetical protein
P30_SouthEast_2_VIM_2_10_11_04045	tape measure domain protein
P30_SouthEast_2_VIM_2_10_11_04578	hypothetical protein
P46_SouthEast_6_12_12_00078	4-hydroxyphenylacetate decarboxylase activating enzyme
P46_SouthEast_6_12_12_00079	Transposase
P46_SouthEast_6_12_12_00080	Exodeoxyribonuclease 10
P46_SouthEast_6_12_12_00081	hypothetical protein
P46_SouthEast_6_12_12_00082	hypothetical protein
P46_SouthEast_6_12_12_00083	4-hydroxyphenylacetate decarboxylase large subunit
P46_SouthEast_6_12_12_00084	hypothetical protein
P46_SouthEast_6_12_12_00087	Transposase%2C TnpA family
P46_SouthEast_6_12_12_00269	hypothetical protein
P46_SouthEast_6_12_12_00270	hypothetical protein
P46_SouthEast_6_12_12_00271	molybdenum cofactor biosynthesis protein A
P46_SouthEast_6_12_12_00272	putative addiction module antidote protein
P46_SouthEast_6_12_12_00273	DNA strand transferase
P46_SouthEast_6_12_12_00274	Conjugal transfer protein TraD
P46_SouthEast_6_12_12_00275	DNA polymerase III subunit epsilon
P46_SouthEast_6_12_12_00276	chromosome segregation protein SMC
P46_SouthEast_6_12_12_00277	hypothetical protein

P46_SouthEast_6_12_12_00278	Replication initiator protein A
P46_SouthEast_6_12_12_00279	transcriptional regulator%2C y4mF family
P46_SouthEast_6_12_12_00280	hypothetical protein
P46_SouthEast_6_12_12_00281	Ribbon-helix-helix protein%2C copG family
P46_SouthEast_6_12_12_00282	Plasmid stabilisation system protein
P46_SouthEast_6_12_12_00283	putative nucleotidyltransferases
P46_SouthEast_6_12_12_00284	hypothetical protein
P46_SouthEast_6_12_12_00285	hypothetical protein
P46_SouthEast_6_12_12_00306	hypothetical protein
P46_SouthEast_6_12_12_00338	hypothetical protein
P46_SouthEast_6_12_12_00339	hypothetical protein
P46_SouthEast_6_12_12_00340	hypothetical protein
P46_SouthEast_6_12_12_00341	hypothetical protein
P46_SouthEast_6_12_12_00342	Sporulation initiation inhibitor protein soj
P46_SouthEast_6_12_12_00343	hypothetical protein
P46_SouthEast_6_12_12_00344	hypothetical protein
P46_SouthEast_6_12_12_00345	hypothetical protein
P46_SouthEast_6_12_12_00352	DNA-invertase hin
P46_SouthEast_6_12_12_00353	mRNA interferase YafQ
P46_SouthEast_6_12_12_00842	Virulence-regulating protein VirS
P46_SouthEast_6_12_12_00843	putative FAD-linked oxidoreductase
P46_SouthEast_6_12_12_00844	Isochorismatase family protein
P46_SouthEast_6_12_12_00845	hypothetical protein
P46_SouthEast_6_12_12_00846	Exodeoxyribonuclease 7 large subunit
P46_SouthEast_6_12_12_00856	hypothetical protein
P46_SouthEast_6_12_12_00857	hypothetical protein
P46_SouthEast_6_12_12_00858	hypothetical protein

P46_SouthEast_6_12_12_00859	hypothetical protein
P46_SouthEast_6_12_12_01274	hypothetical protein
P46_SouthEast_6_12_12_05983	Recombinase
P57_SouthEast_3_VIM_2_09_13_01163	Relaxase/Mobilisation nuclease domain protein
P57_SouthEast_3_VIM_2_09_13_01165	hypothetical protein
P3_NorthWest_16_VIM_2_07_06_06604	Pyocin repressor protein
P36_WestMidlands_5_VIM_2_06_12_00368	Putative prophage CPS-53 integrase
P36_WestMidlands_5_VIM_2_06_12_00369	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00380	Patatin
P36_WestMidlands_5_VIM_2_06_12_00381	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00382	thiamine biosynthesis protein ThiF
P36_WestMidlands_5_VIM_2_06_12_00383	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00395	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00396	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00398	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00399	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00403	Transglycosylase SLT domain protein
P36_WestMidlands_5_VIM_2_06_12_00411	integrating conjugative element protein%2C family
P36_WestMidlands_5_VIM_2_06_12_00417	DNA repair protein RadC
P36_WestMidlands_5_VIM_2_06_12_00423	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00425	putative regulator PrIF
P36_WestMidlands_5_VIM_2_06_12_00426	integrating conjugative element relaxase%2C PFGI-1 class
P36_WestMidlands_5_VIM_2_06_12_00427	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00428	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00429	PglZ domain protein
P36_WestMidlands_5_VIM_2_06_12_00430	RNA polymerase-associated protein RapA
P36_WestMidlands_5_VIM_2_06_12_00431	Divergent AAA domain protein

P36_WestMidlands_5_VIM_2_06_12_00432	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_00602	transposase
P36_WestMidlands_5_VIM_2_06_12_00603	Transposase
P36_WestMidlands_5_VIM_2_06_12_01217	Transposase%2C IS30 family
P36_WestMidlands_5_VIM_2_06_12_04009	Integrase core domain protein
P36_WestMidlands_5_VIM_2_06_12_05458	Hca operon transcriptional activator
P36_WestMidlands_5_VIM_2_06_12_05459	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_05460	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_05461	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_05462	DNA mismatch repair protein MutL
P36_WestMidlands_5_VIM_2_06_12_05463	hypothetical protein
P36_WestMidlands_5_VIM_2_06_12_05464	Adenine specific DNA methylase Mod
P26_Wales_1_VIM_2_11_10_00351	Protein-disulfide isomerase
P26_Wales_1_VIM_2_11_10_00956	Transposase
P26_Wales_1_VIM_2_11_10_02115	hypothetical protein
P26_Wales_1_VIM_2_11_10_02116	hypothetical protein
P26_Wales_1_VIM_2_11_10_02120	hypothetical protein
P26_Wales_1_VIM_2_11_10_02121	hypothetical protein
P26_Wales_1_VIM_2_11_10_03509	hypothetical protein
P26_Wales_1_VIM_2_11_10_03510	hypothetical protein
P26_Wales_1_VIM_2_11_10_03511	methionine aminopeptidase
P26_Wales_1_VIM_2_11_10_03512	hypothetical protein
P26_Wales_1_VIM_2_11_10_04300	phage regulatory protein%2C Rha family
P26_Wales_1_VIM_2_11_10_04301	hypothetical protein
P26_Wales_1_VIM_2_11_10_04302	hypothetical protein
P26_Wales_1_VIM_2_11_10_04304	Serine/threonine-protein phosphatase 1
P26_Wales_1_VIM_2_11_10_04305	hypothetical protein

P26_Wales_1_VIM_2_11_10_04306	Replicative DNA helicase
P26_Wales_1_VIM_2_11_10_04307	DNA replication protein DnaC
P26_Wales_1_VIM_2_11_10_04308	hypothetical protein
P26_Wales_1_VIM_2_11_10_04309	hypothetical protein
P26_Wales_1_VIM_2_11_10_04317	KilA-N domain protein
P26_Wales_1_VIM_2_11_10_04319	hypothetical protein
P26_Wales_1_VIM_2_11_10_04328	hypothetical protein
P26_Wales_1_VIM_2_11_10_04329	hypothetical protein
P26_Wales_1_VIM_2_11_10_04330	DNA protecting protein DprA
P26_Wales_1_VIM_2_11_10_04331	integrase
P26_Wales_1_VIM_2_11_10_05017	hypothetical protein
P26_Wales_1_VIM_2_11_10_05457	hypothetical protein
P26_Wales_1_VIM_2_11_10_05458	hypothetical protein
P26_Wales_1_VIM_2_11_10_05459	hypothetical protein
P26_Wales_1_VIM_2_11_10_05460	hypothetical protein
P26_Wales_1_VIM_2_11_10_05466	hypothetical protein
P26_Wales_1_VIM_2_11_10_05469	hypothetical protein
P26_Wales_1_VIM_2_11_10_05470	hypothetical protein
P26_Wales_1_VIM_2_11_10_05485	Type IV secretory pathway%2C VirB10 components

Figure S4. Multiple fasta file of SNP alignments.

>E6, London\_26, VIM, 06.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCANAACCTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGNGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCCACTCGGTTCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGANGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGGCGTGCCACAGGACTA  
TTTGTGGACATTGCNNCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTNAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCT

CGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGTCCCTCTACTTCCGGTACGATTGCTAAGATATCCATTACGGC  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTANTTGTGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGTCTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGACGTGCC  
CCCTCNCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCTCCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGNGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCNGATTTGCTCCCTACGGTAACGCGGC  
NATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGANNCCATATTATTAT  
GCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTNCT  
GATTCTAACCAGGTGACGGGACGACTGTCACAGAGTATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTAT  
CTGGGGTGAGCAGCGCCCTCGTCCCGTTTTNCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGT  
GACTCGTGGATNCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCT  
CGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGACC  
CTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGGAGCGGTGGCCACGCGATCTACCAAGTTTTATACAGATCCGTTATGTC  
GAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCCGCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTTCC  
ACATCCCCAGATTACCAAATTCNCGCGCAGCTTCCCTAGTACCNGGCGGACAGAGAATGTCGGTTTTCTTAC  
TCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTT  
AGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
CTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTCTGTCGCCAGACTAGGTTAG  
GAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTCCCTGCCAACTATTGTAATGGCGAGCACATT  
AAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCNCCTGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCGTCCCCGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGGGCTACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC

CANNNTAAGGCCATAGCNGTGNGCNTTAAATCCGGGTNTNTGTCCCCCCCCGAANTCTCGCNNGGGGATT  
CCCCGCACCGCCACNTGTGGGATNCANCGAAACNTAGGCGTGTCTGCGCGCCTTGNCCCACCTGGACTTGAG  
TCACGANNTCGATCGGTCAAGCGAGGGGTANCNCTGCACATTTTCTNTGACCCACACAGGGGAAGTCTCC  
TCCGTACGGGAGAAGAACTATTTNCATGTTTTCGCCGTACCCTACGTGATCAGGCTCNCCGGCTCTGCCAGC  
ACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATG  
TCCTCTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCAT  
CGAGTGTGAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTT  
TGTCCGGACAACACTCAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGG  
GTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTT  
GNCTGTAGGCCTCCTTACCTGCGTCCGACTCTTGAGNAGTCTCCTATNCTACATCGTTGGNNGATAAAC  
GAGTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGCCATCCAGCTGG  
GATTAGTCGTGCCGTGAGGCTTCTTNNCCGCCAGTGTGGCCAGGGTGTGTTCTGACCTCCATCCAGATC  
ATTCAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAG  
TCTACTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTG  
TGAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCAT  
CTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCT  
AATTCTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTT  
GTACTCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGG  
CTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTC  
CATCCGCGNGCTCATGCCNTTCATATTAGTCGAGTCAGGCTCTACTGGCNGCGATTTCTTTTACTACAACAATN  
CGTTCCGNTCTGCTNNTCCTNGTCTGCGTCTGTGNATCCTTATGCACAGTATAAACGGGCTGACTCANGGTAGC  
ATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAA  
TGATGCTTTCAGGTCCTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCNCGATGACAC  
TCGCAGTGGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACGGGCGCTTATCCGTGCTACCTTACTCACAA  
CATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCNGATATCTGTTAGCAATA  
CATGGGGAGAATCTTTGGTACTTTACGTATTCCTNCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCT  
ATTAAGCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGG  
GAACAGGTCAAGCTGTNGGGTNGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTCTTCGCCGAGCTA  
AAGAAACCGGGAGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTGC  
ACTCCTAGAATAACACGGCCGACGTTTTGNTGAACCGTTAAGNNGGTCCTGTGGAGGAAGACCTCCCATTA  
CAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGG  
CACGTCACCTCACCCCGTCCGGCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCNGGGACACTCT  
GCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCA  
TTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGNGGCCTCCCATGATTACGTNTA  
CGTGCCNCTCGCCATGTGCGATNTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAAC  
ACCTACAAAGANGGAACNACCGCAAGTTGCGTGACGGTCCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGT  
ACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCNCAACCTTCTNCCCGCT  
TTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATC  
TTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCT  
GTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGCCCTATACAGAAAGCTGGGGGACCA  
GGGATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCG  
AAGAGCGATAGAAGTGAAGCGAATTACAATACGTCTCTACGTGTACTAACCTATAAGTCAGGCTTTGTAC  
TGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTNCTACGTTGCGCTGGCC  
CCGGCGNTTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACNGTTTGACCCCATGATGGGGAAAGCAC  
GGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAGTGCCCCGTGAGCACTTC



TCTCCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGA  
TATTGAGCGCTTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTG  
CGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAA  
GTGGCCTGCGAACGTGAGTGGGCCGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGC  
CCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGCCACGTGCTCCATTTGGCA  
TTGGGTGGTACGAAACCGCACTCGGCAANCGCAGCTCTCTTGTACGGCTGNGAAGGTTGCAAGAGACAGTT  
CCAGCACATGACATTCGCCACAAGCNCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCA  
GGTGCGAGTAGGTCCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTT  
CCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGC  
TCCGTAICTGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCA  
AGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGA  
CGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGG  
TCAGAACGCCGATAGTGGCGCCNACTGAAGCCCCAAGGTGCTTTGATAATTCGCGACGCNNGGTATCAACAG  
CCGACGGGTCTTTTGTAGTCCGCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGT  
CGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTC  
TCGTTACAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGC  
GGCCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCA  
CCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGNNAGATGTTNTAGTGCTAGGTCCACGCCCAAGGC  
TCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAAGGGCGACGGGG  
ACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTANATCTCGNTCGGGGGGCAAGTC  
GGATGAGGTTGCCGANACCAACGCCCGACNGTAATTTCCATAGGCAAACCCCTCTCTNGAATCTGTACCGCT  
ATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGCAAAAGACAGCGACAGACAGGANCTGGNTG  
ATCAGTAGCTACNNGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCT  
CCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATAC  
ACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGG  
CCTTCGTACGGTGTATGTGTAAGTGGGCCGCTTATCTGGGCGACTAGNAATGCCAGAACCCCTAGTACGTGGG  
CGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGC  
AGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGANGATCGTCGTAACCCCTGTACGCGCCAT  
ACCCNAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTGTGTACGATTAC  
AAAGAGCCCNACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAAGCACGCGTGC  
GTTCCGCTGACTNTCGACCCGCGTGTACCAAGCAAGCATCCCGNCAAATCATGTCCAGTATACCTCCTTTG  
TTCCTCTCTGGGTTGTGCGCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCG  
ACCGGGCAATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTNCCC  
GATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAG  
TACTACCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAA  
AGAGTCNCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAG  
GCGATCGGAGTNCCTTNGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAC  
TGTCCCGATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACG  
AATGCAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTC  
ATCAATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGA  
ACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATNATGTCACAAGGAGGATGTCAGACCCCGAGG  
TGTAGCGAGCGNGCGGGAATCGGATCGNATGAAAAGCTGNGCATCCNNAACACNGTCTTAAGAATCGCA  
AATTGAGGGNGCTGACAGCCATCCACTGCCGNGGCAAGTGTACGTCNTACCTNCCAAGCGGTCCCAAGTAGC  
CTAACGGCGGGGATAATAGGTGNAGGAGCGACAAGCCNACTGGGGCTTCGGACATTGATGTGGCNGTTACA  
GNCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCC

AACTAAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTNGAGCGTACCCCAAG  
GGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGG  
AAAAAGCGANCGTCTCCGCCGACCAANTGCCTTCGCGAGTGCCGCACCCGGTCTCGGCATTAGAGCATGTG  
GACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCG  
ACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTNATTGGTCGATTAATACACCGC  
CGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGC  
TGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCGTCTT  
AGGAATCGCGGGTGTATGCCCTGTGAAGNGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTAT  
AGGTCAGGCTCNGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAG  
CGCTGTAGAGGAAGACTAATTCCTGANACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTA  
CCGATGAGGAGTGCAGCGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAA  
AAACACGGAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGA  
ATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCA  
GGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGGCAAGTGAATTAGGAGCGGTT  
TCCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGAC  
TGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT  
GTGTTACGGTGGTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGA  
CGAATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATG  
GCGTCCAATTAGGTCTTACACCCTNCCCGAACCGCATCCGGGGAGGCCGCTGCANGCGGTTTCGTTACGCCA  
GTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGGCCAACAAGTGGAGCAAAACGGTAGG  
CGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGNAGGATACGGGGGCCCTTGAATNGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAG  
CGAGGGCCAATACCCNAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAATCAATACCCCTAAGACCAATT  
TTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGNCCGACAGTGTGGCGAAAGGCAACAACAG  
GAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAG  
CAGGCAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGNGAATGGAGC  
CNAGNACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGA  
GACGGCCTTCTTCGGCACCAGAATTATTTGTTGTCCGACGTTAATCAGNCTCGTGAAGGCACGCGCTATCTAG  
GGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGG  
ACAATTCATGCGCGCTCGTGCTGCGCAATTNCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCC  
GCCGTATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTTGTGGCGGGTGGTTCCATCCCGAACCGCCACG  
TAGCAGAGCAAGAAGTNGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACA  
GCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGNGGACAGAAG  
TAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATT  
TGCTGCCAAGAGTATGAGGGTGGGACGGCAANGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACGA  
ATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTAC  
CCGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCT  
CCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAATGACTCAGGATTCCGGCAACCGTAAT  
CCCGACAGCGGCGTCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCC  
GAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACNAG  
GGCTTGCCTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTACTGATCGAAACGAACGAACTG  
AACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGNNGCAAATTCGGCGAAAGGCGGTC

ATGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGAC  
TGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGT  
ACCANAGACACGCAGACAAAGACACCCATTGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTG  
ACTCTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAACCGCAAGAAAACCA  
GCTACCCCGCTCCAAGTGCACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTG  
GGAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAAC  
AGCAATGTCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGA  
ATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGC  
ATGGAAGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAG  
TTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAG  
AAGACGGTGNAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGNCGAGGGTTGCACGAAGGAAG  
ACTGGGAGAAGTACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGAT  
GGGACTCAACGCAAGCATCAAGGACCTGGCAANCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGC  
TCCGTCATAACCCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAAC  
TCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGC  
GTGAAAAGGTCATANCTATTTAGAATCCCTAGCCACAGNTCTCGTCTTGCCGACTCATCTGGCACCTTAGCCC  
CAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTT  
GGGAGNAAGAATGTCACACGGAGCCGCGGAGTGCTTTGAANGTCAGAACAAAAGGATATGTATGCCACTC  
CCCGGATGAGAGCCTCTGGCGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGT  
AACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTA  
CCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGAT  
GTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTCCGCGCTT  
TGCAACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAAGTACTGAGANNCA  
AGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCG  
GTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGG  
GGAGATAAAGTAGGGCCGCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCC  
TGCGCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGG  
ATCGCTGAGGAGTAGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGC  
ACCCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTAC  
CTGGTTAAACTACAGGTCNCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCA  
AAGAGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGC  
GGAGGGATCCGCCCCCTAAGAAAAGCGATACTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTT  
GGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATNACCAATCTAG  
CTGGACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCA  
GGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGT  
AATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTCAGANAACGGTCTGCGTTGGAGTACTATA  
GACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTG  
GAGATAAGAGCCGACACTGGGTCTAGCGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGAT  
TACAGCTATTTTTTATGGAGCCGCTCAATAGCGGGCTTCTTAAACGGGTGAGCTGGATTATGGCTACACCGG  
AGACTCCAGGCCGATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCA  
TAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGGAAGGG  
ACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCACTNGAGTG  
GTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGC  
GAACNGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTG  
CGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTG

CACATCTNNCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTIONATAACTGAGAAGTGGTCACTCTAGC  
TGAAGATACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATG  
CTCCAAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAAC  
GAAAAATCTACTCCGACGGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCCACTCTTGTT  
ATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTC  
CCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATG  
CCTATAACACCTAACAGCAGACATTGTCGGCTCCGACGGCCGGTACGGGAAAGAGGGGGACCAGCAGACG  
TTTGCCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAAT  
GAGGCGGTGTGCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGA  
GATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTNGTAGGGTACAGAG  
TCACCAAGGTTTCGATCAGGCAACCAGGTCAAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTC  
AGCATCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGA  
CTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGA  
TAGGGTAGCGTCAAAGGCCGCTAAATGTTATACCTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTG  
AGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTNTTTGTTAACCAAGTAACAACAA  
GAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATG  
AGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAAACGGCGTGGCCTTT  
GGNCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGAC  
TTAGAGGAGCTCCCGCACTTACTGGCCGTACTIONATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGA  
GACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCC  
GTAAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGT  
GCCCCAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGT  
ATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGGCGGCTCGGGGT  
CCCGACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTT  
CATCGGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAAGCATC  
GTGCTACCAGCCGCCGATAAGATAACCCGCAAAGAGTGCATAAAG

>P63, London\_25, VIM, 03.14

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCNCGTTGCAAGGAGACGGGCTCNTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTNTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAACTGCATGGCATGCATTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTTAAACATCTCAGCGTCTGTCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT

GGCNGCTCTGGCGTGGGTCTAGGGTCCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTA CTGTG CACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGNGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCNACGCATAGTCGTTGGATAACCCAGCC  
GNTCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGGACGACTGTCTGCCTNTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTNTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCGTATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGNCTCATCAATGCGGACTGACTCCACGCTCCT  
CCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCAGCTTACTTACGGAGGTA  
CCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCC  
CTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACGACCAGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGT  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTNCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTCTTGTAAACACAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTNGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATNTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCCTAATAGATGTA CTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAACTGGCAATAAGATTAACGATCTTCCATCAGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGNTCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGT

GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGTGACCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGNGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCNCTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCT  
TCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTA  
NGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCCNGGGCCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTTGACCCACACAGGGGAAGTCTCCTCCCG  
TACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACNCTACGTGCATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACNCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGTATCCAAAACCGTTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTACTCTGCGCTCCGACTCTGGAGNAGTCTCCTATNCTACATCGTTNGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCGNGAGGCTTCTTTCCCGCCANTGNTGGCCAGGGTGTGTTTGTGCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTATATCGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGGCTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCTAGTGGCTTA  
CTATTGCCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT

CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATNGGATGGAGGTTCCGGCTGGTCTTCGCCGAGCTAAAGAAAC  
CGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGNGCTGGACCGGCTACCAAGCGTTGGCACGTCA  
CCTACCCCGGTCCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCTCGCCATGTGCGATNTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACA  
AAGAANGAACCCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATAT  
TTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAANTCCTCAACCTTCTCCCCGCTTTTTGGG  
CTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAA  
GGCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTAC  
ATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGCACCAGGGATT  
GCACGGCAGCGCGAGGTGATGTCCNGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGC  
GATAGAAGTACGCGCAATTACAATACGTCTCTACGTGTAACCTATAAGTACGGCTTTGTCACTGGTGA  
ACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCG  
GTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGNTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCTAANCGGATTTTTAGTTCGCAAGTGAAAGTGTCCCGTACGACTTCTCTCTCT  
GAGTAGAGCCCATCAGTCCNATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTG  
AGCGCTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCT  
GCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTATCCAATTTGCGTTTACGCTGCTGGCTAGTAAAGTGG  
CCTGCGAACGTACAGTGGGCCGCGCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAA  
TGACAGTACGACCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGG  
GTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAG  
CACATAACATTCCGCCACAAGCTCTGCCACTGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGC  
GAGTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTCTCTATA  
CTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
CTCGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTNCNCCGAGCAAGTAA  
CGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGAC  
AGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGNAAGAATCACCGTATGGGGTCAGA  
ACGCCGATAGTGGCGCCNCTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGAC  
GGGTCTTTTGTAGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGCTCGGCA  
ACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTC  
AGGGTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCCG  
ACGACGGATCGGTGTAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAGGGGGGTTCCACCGCGA  
CAACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGG  
CGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGC  
AGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATG

AGGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTG  
GATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGT  
AGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCANGTCTCCCTAG  
TCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCTACCC  
CAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGT  
ACGGTGTATGTATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGC  
CTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGGCCNTATTACCAACGACGCAGANC  
AAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCC  
CAAAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGA  
GCCCTACCCACATCGGGCGGAAGCAGACTTGAACCACTTCACTGGGAACCAGAAAGCACGCGCGGTTCCG  
CCTGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCTCCTTTGTTCTCT  
CTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCA  
TATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
GCTACGTGGCCATTTCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCG  
ATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGNCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAG  
GTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCCAAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC  
GGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCNGNCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGCCGCTTTAA  
GNCAGCGGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATAC  
GAAGTAACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAAT  
CGCGGGTGATNNCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCA  
GGCTCNNGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGT  
AGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATG  
AGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAC  
GGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGG  
TTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTC  
CGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCCG  
GACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGGATGCTCAAGAGACTCCGACTGACAGC  
GCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTCA  
CGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGC  
GACGCAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATC  
CGATGCCGTTTCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCC  
AATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATA



CCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCCAACAANCGGAGCAAAACGGTAGGGCAGGAA  
CAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
CATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTAT  
GTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGC  
TGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGG  
CCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTTAAAAG  
CCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAG  
CTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAAC  
ATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCC  
TTCTTCGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGG  
TAAGAACTTTAGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTC  
ATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTAT  
GAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGA  
GCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACA  
GCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAG  
CTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTAAAGATTGTGCGGACGCATTTAGATTTGCTGCC  
AAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTCAACGCCGAACCTGACGAATAAAAC  
GGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGA  
GGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTAT  
AAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAG  
CGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGAC  
TATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGC  
CTAGCATTTGATTTCTTTGCTTAGGCACTTCTGATGTTGGTACTGATCGAAACGAACGAAACTGAACGTGGAC  
AAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGATGATAGTAT  
ATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAA  
TTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTCTGTTAACGTGGTACCATAGACA  
CGCAGACAAAGACACCCCATTTGCTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTCAGA  
TTCCAATGGCTGNNCATGTATAATTCGAAAGAACNTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCG  
CTCCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTCAGAAGTTTGGGAGGAGCT  
CTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCC  
TAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTAAAAAATGGAATACATTCCGC  
GGGGGGTAGAGCAGCGAGTAAAGGTGCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATT  
GTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTAC  
CCCGCAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGG  
AGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAA  
GTCACGCTATCAGGAACATGTACAGTACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACG  
CAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACC  
CTTCNCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAG  
GAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTC  
ATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTG  
TGCGGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAA  
TGTACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAGGATATGTATGCCACTCCCGGATGAGAG  
CCTCTGACGACGCCCCGAGGAAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGT  
ATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTC

CACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGGCAGCCTTAGATGTAGTAGGCAGC  
CCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCA  
TAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGANNNACAAGGATCGTATGG  
ACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTT  
AAAGTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTA  
GGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAG  
GAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGT  
AGGGAATAAGTTTGGCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAA  
TGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACA  
GGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGT  
AACGATCTGGTTGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCC  
GCCTAAGAAAAGCGATACCTCGAGTGTAGGTNGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGG  
TCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATT  
GATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCG  
AGGCGGTCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCTCGTAATGAGGAGTGTG  
GGTGGAGACAGTAGGCAATCAACGCGCTCAGANAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCAAT  
TTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGA  
CACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGTGGCCATTTAAGAACTGATTACAGCTATTTTTTCAT  
GGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACNCCAGGCCGCA  
TATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAAT  
CTACTTCTATTACGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCT  
TACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTG  
AATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGAC  
TCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGT  
CTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCG  
GCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCAGC  
AAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGA  
GCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAACGAAAAATCTACTCCG  
ACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCCGCACTCTTGTTATTACGATCTTTCTGC  
CTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAA  
GAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACA  
GCAGACATTGTCGGCTCCGAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCA  
GCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAA  
ATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTT  
ATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTNACCAAGGTTCCGGAT  
CAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTAC  
GTGGGTGCCCGGTGCCGCCAAGGTGGNTTGTGTTGCTGGACTCCTTGTGCACGACTTCCCTAGCTATCCGG  
CTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAG  
GCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTG  
GCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATC  
CGAATACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGTCACTATTGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGNGCTCCCGCA  
CTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCGGAC

AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCCTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>E11, London\_28, 01.14

TCCCTCGTCTNCCNAGTATGAACTTCTCTTACTGCTNTCCANNTGGCCACACCGGGTCAAATTCCGCCA  
AACACCNNNCGCTACCAGACTTCACATGGTTCGCCCGTTGCANGGAGACGGGCTCTNCAGAACTCTTAAT  
GAGAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGANTAGCTCTCCCTACTTGCTGAANTTGGCGTTG  
GAACGGCAGTAGTAGACGTTTCCNTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACT  
AAGACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCNGTCTNTNCCGAGACGNTGCAANACCGGT  
CNCNCTCCGGGACTGACTCTGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTC  
TTNGACNGNAGCTGGCTCTANCCGACTATCTATTCGTCTGCGCTTACCNCCCCCAGTTTTCGCGCCTTACCG  
AGCTTATCTTAGTCTTANCCACAGGCATGCGTCTGTGTAGTTNTCCCATAACTCTCCAACGGGCTTGAGTG  
AACNGAGTGANTTCTGTTGGGGATTGTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGT  
CCCACCGCCCCTANTCGGTGCGCGGCTGGAAAGCTATANAGGTTGTCTTCCGNACCACTGGCNCCCCGCCG  
ATGATCAGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGA  
GCCCCGTGAGTGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCAT  
GGTCTGTAGCNCAATCCTCTAAACGCTCGAGATAGGGNTANCGCGCAAGCAGTCAGCTTNGTNTCAGTGAA  
GGAATGTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTNCTCTNGAAGGG  
NCTTCTAAGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGAGTCGC  
GCACTGCCTCAGTTTTGCCACCTGNGGTCCTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGANCGAC  
TAGNATGCCCTATCCGTTTACGATCCGTGCGCGNTCTTGCTCACGGANTCCACCTCACNAGTTTCGTTATATGG  
TTCGGGTTCTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTGCGTGCACAACGCTTACGNAGAACNAAGAAT  
GGAACGGACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGT  
ATTGGTGCATTGGAGAATGNCACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGC  
CAAACAANTGNGNGTTCNNGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTNGACCTCAA  
TATCAACCTGCTCGTATGGACATTTCTAGCAGNTGTTAGCCCATATCTCCAAGGAGNTATCTCGCCATGTCCC  
AGGTCAAATCCGCTCGNACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATC  
ATAATTGCGTGGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTC  
TTCCGCTTGNCTACACTATCGCTGTNGCCGACTANACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACNCCA  
TCATCTCAACNTGTTTTACCACTTACTCANCTTTAGTTTCAGTAAGGCACCGACNGCTTATAGCCCCGCGCTG  
CTNTCCTGGATNTTNGNTCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACA  
TCNCCAATAGCCCCACGNTGNNNGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCNACNNATANT  
CGTTGGATACCCAGCCGNTCTGGANCNCCATTANATTAACGGCCTATGNNTTTTCCATTTGCACATGAGCN  
CAGCCATCAGGTTAACCTANCTTTGGACCCGCCGCTAACATGAACGCGTNNNCTAGACGTTTAGTTAAAC  
TTCCCTGCTGCGAGCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATA  
TAGGCNNGCCACAGGACTATTTGTGGACATTGCNGCTCTGCGTTTCGCTCACCTTGTGCTATGCCANCTTN  
NCCNTGCCNNGCGGNTGNTCGTCACNACATTCATNCTCTCTTTCTTTAANGAGNGGTTGGGCCCGCTATA  
GNCGCGCCTNAGGCTCGACCAGCCGCTTNTCCTCTGCNCANAAGCATTGCACCCGCGGACGACTGTCTGCCT  
GTTTTACCCTCCTCCCGCTATCCTCGANACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTANNGCCTG  
NGNCCCCCTTATACATCNNACGAGAGGCCGGTGTGATTAGTATCCAANCTCTCTACGGTAATTTTTGTGCC  
GGACTGGTGCNCNTTNGCCTTNGCGGGAACCCATGCTGCAAGCCGCCAGGCGGNTCCCGNNAGNNGGGTC

GGTGCGAGTTCNCGTCCGTGACTCACGAACATTNTNCGGCCNCCTCTTTCTCGCTCTAGGCCCTTAATTNCNA  
GCCCCGATTCTGGGTCGGTTTGTAGTGTTATCACGCCTCGCCATGGACTAACTTCGTANCTCATCCGACCGTT  
CCGGGGACACCTCATGTTCTGCNATANGATCTCCCGNATNTAACACTCCTCAGCTCGCTAANCACTGTGGC  
ACAGTCNGTGAGCTAGNATCCCGGTGANGATCNATATAATNGCGCTTCTCTGTCCGATGTTGCTCCACCTGNT  
GAGGCGGGCNCATCACGGGTCGGAGGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCT  
CATCAATGCGNACTGACTCCACGCTCCTCCTCGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGC  
ATTATTAGCACGCTTACTTNCNNAGGTACCCGTGCTGAGNGCTAGGCACGNTCGTGGCCATCGCNACCTGCA  
NATATGCCTTTTACAGTAGCCCCCAGTCCCTGAGACGGCGAGACCCGTGAGGCAGGCNCCGCTTACGTTTA  
GACCACGGCCGNGCGCTCCAAAGNGTTAGCTTACCGCAAGTTNTGCTTGGTATTGGGGGCGGTCCCTCTAC  
TNCGCNGNCCGATTGTTAAGATATCCATTACGCGCTGTCGTGCACTACAGGATACGGGTCTTTCCNGGTGTGT  
GGGTACATTATTGAGTGAATGCTNACCACCGACCCTACCGCACAGGNNNTATTAGTGCAATTTCCGACCG  
GTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCAT  
NCCGCCAAATCGTCATTTAGCTTNGCTAACTNATAAAGGTGCGTGTTCCGGGAGGATTAGATNCACGTCCCTCT  
TGAGCCCTATCCTTTCCGNATACCAAACAGATNAGTCNCCCTTCCNNANNNACANAGACCGACGCCAAATCC  
AACATCAAGTACTATTNCCTNGTTCGCATCCTGTTTCGGTTCCTTGTAAACAACAGATACGCTATTTGTGCG  
GCAACGCCATCCTATAACGCACGTAATCGGGATGGGTCTTGNCTTCGTCCNNNAGCGTAAATTTCTTGAGG  
CCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTTACTCNNTCTTATCCTCGCCAGGCAGTTCAGCTAAAT  
TATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGG  
TCTCGATGCAAGGCCNCTGCATCCACTATCGCTTTTACGAGAGTAATCATTGTTACACTATTGGGTTGGNCC  
GCNGCTTCTACCCTGGCTGCTCNCNNTNCCGGGGCTATNCCTNATAGATGACTGCATCAGAGTGCTTNTG  
NTGGTGTCAANCNCANGCACTATGTNGTCAGATGTTAGGTTTCGGCGTTCGTAGTTTTACTCGCAACCNATCAC  
GGGTNTTNNNCTGCGTATNCTCCAAGGCGTTTCGGTGGGGCGCNGCGTTNGATCGAACGCTCCCCACTAA  
ACCCTCGAACANNNGCTAGTCTCTCCATNNTAGGCGCGGATTTACCCTTGNCTTTCAANNNGCTAATCCCGG  
GGACTCCAACNNCATGAACTTGTTTTNGANNCGGGGNNCNAATNCCGAAGCCTTGAGCTAAACTGGCAA  
TAAGATTAACGATCTNCCATCACGATTGGTCACTCGCATCGTTCGGTCTNNACACTATGCTGGTTTTTACTNCC  
TNATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCCCCTCTCGTTGCNTTANCTTGGGT  
NNNGCGTTCNCGTGCCCTTCTCGCGACAACACANNCCGGCGCTNNTTGGGGCGTGGCCCNATGGGTTCC  
CGACGCCGCNNCTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCCTAGCCTGCCCTTTGTAGCCGTAC  
TTAATCCTGANGGCTGAGCAGCTGTGCGCCAGAGTTNGTNTGGTGAAGNCGTTCGATCATCACTTTGAGA  
ATAGCANTGCTCAATTCACCAAATCCGCGATNACTATTGNNTGTATCCTTAATCGNCACGCCGATGGTCTGT  
AAAATATCGNGACCACCCGCCGATCTTATCGATAACCCGCACTGACATCAGTGCTTCCCCTNNACGCCGAGT  
TTCTGCACAAAGCTTGAGANCGCCGTGGGATTTGNTCCCTACGGTAACGCGGCNATACGAGCGACCAAATTA  
AGCCCTGANCGAGTGGCTCCTTCCGTAGTCTNACGACGATACCATATTATTNNGCCTGGGCGCCTCGAGAG  
ATANCGNNCAGNCCACGCCNGNNTTTGTAAAGCTCAATGAAAGGCATTNCTGATTCTAANCCAGGTGAC  
GGGACGACNGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCTGGGGTGAGNNGCGG  
CCTCGTCCCGTTTTTCTGTTTANACNGTGCCCACTGACGTTTTACGACGGTTGTGACTCGTGGATGCCTA  
TCGCNTTTTTCTCATNNGTNAACATAGNATTNTCAATGGAGGGGGTGCGAGCGCTCGGCCGANAGGGCCC  
ACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATNGACCNTTGATTA AAAACCT  
CAGTGGTAGTGGTCCNCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGTCTCAGCGATGCTATTCTACGTTG  
CTCCCGGGTGANCGGTGGCCACGCGATCTNCCCAAGNNTTGTACAGATCCGTTATGTCGAAATCCCCATTAAN  
ACACGTA ACTACTAGCTTACTGAGTTTCGACCGGGGCTCACGACGCTTACCCCCCGCGTCGCCACTTGAA  
GGTGGNGCATCCTCTNAGAGGCTCTGTCTGNGGTTCCCTCCNNTACTATGAGTAAATGTACCATTAATCA  
GTNACGCCATTGGAGGTACGGATNTGCNNNNACGGATCTTAGCTGTGCCCTTCTCTTCCACATCCCAGATT  
ANCCAAATTCNCGCGCAGCTTCCCTAGTACCCGNCGGACAGAGAATGTCGNTTTTCTNACNCCCTAGTGGG  
CGTATCGCGNCCACTCAATCGGNATCNTCGGAGCCACGTATGACCGGGTCAAGATAAATNTAGATTTAACGT

AAGAANNATGCCAGACATAAACTAACTGTCATNGTAAACGTGCTGACAAAANTTNCCATTGCCCTTATTGTGNN  
GGGAGATCCANATANGCGGGTNCCTTTACGCCNCTTTCTGTTCTGCCAGACTAGGTTAGGAACNTATNC  
AGTACCNCTTCCGTAACCTCGNTGGTGNNGNTTCCCTGCCAACTANTGTAATGGCGNNNNCATTAAACCGCT  
GGGTAAGGCGCAACTTGCAGAACTGTGTTGCGGGCGCTCGACACCGGCCGGGNGANTTTATACGCGCCNCG  
CNNGGGCCCGTCCCCGAGAGCGGATAGNNCCTCATAACCCTGCAGCCACGCGGCGGTCACTACNCCTCCNC  
TTTCNGACCCTCTCGTAAATGCTGGGGAGTCTCCTTGACCCCGAGGGGTCCCGACGTACCTTACNNACCTTA  
AGGCCATANCTGTGCGCCTTAAANCCGGGTATTTGTCCCCCCCCGAAGNNTCGCNCNCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGNCTTNGCCACCTGGACTTGAGTCACGAC  
CTCGATNGGTCANGCGAGGGGTACCNCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCNNCCTCCGTAC  
GGGAGNAGAANTTTTCATGTTTCGCCGTACCCTACGTCGNTCAGGCTCGCNGGCTCTGCCAGCACACGTT  
GGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCTCCAGTCTCGAATCTCCCGGTCNTCATGTCCTCTC  
GACCCCGGCTTNTAGACGATAGNTTATTCTAAGAATNAGCGGTGGCCCTNCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGNGTTTCTGTATCNNGNNGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTG  
NGGACAACACTCAAAGTCGTGTGCGGGTACGACNCCCCTCAGTAAGACTCTCGCGTGTNGACGGGTAA  
CAATTTGACCCATCGCTGGGACCACTTNTACNACAGTGATCCAAAACCGGTTTTCTGATGACTCGNTTACT  
GNAGGCCTCCTTCTACCTGCGCTCCGACTCTNGGAGGAGTCNCCTATGCTACNTCGTTGGTAGNTNACGAG  
TCAAGTCNGAGCGAGCCAGCATCCTAAATGCTGCAAGTTATCCGCGCCATGTTCCNGNGNCATCCAGCTGGGA  
TTAGTCGTGCNCGNAGGCTTCTTTCCCGCCAGTGNTGGNCAGGGTGTGTTTGTCTGACCTCCNTCCAGATCA  
TTCAGCCGANACATTGAGTGGGACTCTCAACGCGCCANGGGACCTTNCCTATTTGGTGATACAGTCCGCAGT  
CTACTCCAGGGTATTNGGACCATCAAGTCGCNGTCACAAAGAAATACCATNNACACCCCCAAGCGCCTGTGT  
GTAGTGGGCGCTCTGTTNTAGTAGCTTCNTANCGTCGTTTCAGNGGGCACTACTAATGNTACCAGTCCCCGCAT  
CTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTCT  
AATTNNCTTTTCGCTNGANGACNNNACGAGCNCATCGGCGNTGGCTGGCATGCCCCAGCGGCGTGTTAN  
TTGTACTCCTGAGCAGCTGTAGAAGGTGTCGNTGTGANGAAGAACCCGTCCTGGNNGNCGCGGCGCTAG  
TTGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCNCTGATG  
GTCCATCCGNGGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATNNNTTTACTACAAC  
AATCCGTTTCGCTCTGCTCCTCCTAGTCTGCGTNTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGG  
NAGCATATCGAATANCCCTGCCTTAGCACAATTCGTAGCATCATNACTTCTACCCTCATTAACTGTTNGAACA  
TCCAATGATGCTTTNAGGTCNCTACGCGCTCCNCGANCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGAT  
GACACTCGCAGTGGACGTGCCCTTGCNANGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTAC  
TCACAACATCACCATGAGGATCTNTTATTCGGGCGGTCCTGNTAGGCTGTTGGGAGTGCGTGATATCTGTTA  
GCAATACATGGGGAGAATCTTTGGTACTNTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTNATANGATN  
GACCGCTATTAAGCTTCTTCATACCACCTCCTACCCTCANNTTGATCTCCNCCAGATGATTTCCNCTGANTGT  
GGCTCGGGAACNNNNNANNNNGNAANNNNGNNGNNNNNNATTNGNTNNNNNNNNNNCCNNNTGNT  
CTTCGCCGANCAAAGAAACCNNNGNCGNCCNNTGNNNNNNTNNACTGNGGNNNNNTNNGNCG  
NNNGGGGCGGNNNGTNGACNCNTAGAATAACACGGCCGACGTTTTGGTNAACCGTTAAGGCGGNTCCTGT  
GNAGGAAGACCTCCATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGA  
CCGGCCTACCAANCCTGGCACGTACCTCACCCCGGTGNCNGTCTACGGCGATCGTCTACTGCCANGTGCCG  
GTACCGGCGGGGACACTCTGCCGAGTTGCTANACTGCCNTCCGGTGCAAGGNTTTTGGTGTANACTCTGTG  
TACCAGGGGTTNTTACNATTNGTCCAATCACATTCCGCTGGCCNCCCATCTNTCGGCAGTTGGTCCCAGGG  
GGCCTCCCATNATTACGNTACGTGCCCCCTCGCCATGTGCGATTTGGCTCNACCCGCTGTGGGCCATCTTCT  
ATATCCAGCTAGACCCGAACACCTACAAAGAAGGAACCACCGCAAGTNGCNTGACGGTCGGNGCTCCCTCA  
GTCACCCCTTAGTCACTGAGTACGATATTTGGATAGTTCATAGGCATGTATANCCTACGCACCCNAGTTAGCA  
ACTCCTCAANNNTNNCNCNGCTTTTTGNNCTCTAGATTTGGGGGCTCCNCGTTTGCNCGCGNATAGGCCAG  
GAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTACTNNGNCTCCCTATTGTGTCNCTGCGGGCCCTTCT

TATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGCGGTCCCTATACCTTAGTNNGATCCTGTTTCGTGGCC  
TNTANNGAAAGCTGGNGCACCANGGATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTAT  
CCCTATCAGTGGGACATGGGANCGAAGNGCGANAGA ACTGAGCGCGAANNACAATACGTCTCTCACGTGTA  
CTAACCNATAAGTCANGCTNTGTCANTGGTGAACGCTTCGGGTGCCGCGAGGAGNGTAGCNAGNTCGCATC  
AGNNTGTCCCTACGTTGCGCTGGCCGCCGNNNGTTNTTGCGCAATTCTACGGGACGCACCGGCGTTGTGAC  
NNTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGGANCCAGTCGTCTAACCGGATTTNTAGTTG  
CAAGTGAAAGTGCCCTGTGANCACTTCTCTCTGAGTAGAGCCCATCAGTCCGANANGTGCCGATCTGAAT  
CTTGCTAGNCGCGCCNATAACGTTNCCGATATTGAGCGCTTAATCNNTTCCCACCNTGCCGTGCATNCTGT  
CCATATGCCACCAAACGNATCCAGGGTTCTGNGCTGCGNNGAGTTGATTTATGTCTGCCGTTCTATTCTTATC  
CAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTCAGATGGGCCGGAACNGCAACTAAT  
GTCCTAATNCTGACGTTNNGGCTTCTCAGAGCCCAATGCACANTGAGCCGTGNNTAGAGGGGAAGCCCGGG  
GAGGGACGCNNNNCCACGTGCTCCATTNGGCATTGGGTGGTACNAAACCGCACTCGGCAAGCGCAGCTCTC  
TTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTCCGCCACAAGCTNTGCCACTCGCGT  
GGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCGGTNCGAATATGTTAACTTTGGAG  
NATGCTTTATTCGNACTCGGGTTGGGGATCTNNNNTATNCTCAATCTGAANCTTCTCTAAGCGAGGATTACAG  
CGTAGTNTATAATCNCCTCCACGTTCTGCCTCGCTCCGTACTCGTAATATGAACAGCCGGCGTGCTCCGTNAA  
GCTACACAAAAATCTNNAGGGTATTCGNNAGCAAGTNACGACAGAACGAATACCGGCNAGGCTAGTNGTC  
NGTCTANTATCCTGTACTCAACTCAGCCGAAGACGACGACAGGGTCCNGGGCGGGAGANGGCGTGCAATC  
CTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCNNAACGCCGATAGTGGCGCCANTGANGNCCCA  
AGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGGGTCTTTTGAGTCCGCCCGCGACACCGTG  
GCGANGATNCGAATTTGTCTNTCTGGTCTAAAAGGGTCCGNAACCGACGGACTGANGCCGGGGGGGATATT  
ACCANTGTGGNCCGGACATAGCCNTTCAATGGGCNCTCTCGTTCAGGGCNCCGTANAATTGGNGATCTCATC  
TGTCGGAGGGGTTGAGGNTTACTGAGCGNGGAGCCAGCGNNNGNCGACGGATCGGTGTCAGATCGACGT  
TTATCGTGTGAAAAGNGTAGGGTNNAAAGGGGTTCCACCGNGACAACGAGGCGACTGTGTGCGNAGTNN  
ATCAGNNNGATGTTGTAGTGN TAGGTCCACGNCCCAAGGCTCTCNGNGCANTGCTACATGTNACCATAGNC  
AACCCGCTTGTGTGGACGNATAAGCAGAAAGGGCGACGGGGACAGCAGATCGNNCTCAGACTCGGACGCAA  
GCACAAGGTGTAGGGATTANATCTCGNNCGGGGGCAAGTCGGATGAGGTTGCCCGAGACCAACGCCCGAC  
AGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTANCGCTATTCTGGATAGGANGGAAGTACGAACTAGA  
CGCCCCGTGTCANAANACAGCGACAGACAGGAGNTNGATGATCAGTAGCTACNGGGTACGCCTCTNAGAC  
TATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACNNCTCCCTAGTCTACGCCGACTGAAAGCGGGTGT  
CGAACGNANAGGCCGCTAGAGGATCTACGGCGTCTANANACTACCCCAACATAGCATGGTAAGCACTCA  
AAATCCATTGCCATTGCAACGCGGNTAAGTAGGGGGCTANGCCTNNGNACGGTGTATGTGNACTGGGCCG  
CTTNNTGGGCGACNNGAATGCCAGAACCCCTAGTACGTGGGNGCAGCCTCCAGCGTTGCTATTTGTTAG  
CCGCATAGGAGNGTCCGCAGTCGGGCCGTATTNCCAACGACGACAGACCAAAAGAGGGCTCGGGTAGAGC  
GNTNAACTTTGGGTGAGANGATCGTCGNAACCCCTNTCAGTGCCATACCCNAAAGAGTTCAATGACCCATG  
TAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTANGATTACAAAAGAGCCCTACCCACATCGGGCGGA  
AGCAGACTTGAACNAACNTCANNNGNAACNANAAAGCACGCGTGCCTCGCCCTGACTATCGACCCGCGTG  
CTACCAAGCAAGCATCCCGACAAATCATGNCCAGTATACCCCTTNGTTNCTCTCTGGGTTGNGNNTTGGT  
CGTAGGACGATNNCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACA  
CACGGNCTNCACGCCNCTTTTTGNCACTGAATCGCGACCTACTTGCCCGATGTNANATAATAAAACGAGACC  
GGCCCTNCNGTTGTCGTGAAATGGAATTATACTCGACCACGCTGCGAGTACTACCGCTACGNGGCCATTTT  
CCACTGGCACAGNCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGANAGAGTCCNCGTCTAAGGCCTTCA  
AGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCNGNGTCCCTTACAGACG  
GCTCTTCGAGACTATCCCAAAGCCTCTCTGGGNATAGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCT  
ATCGGGGACTAGAGAGAAATATATGNCTACGGTTACATGCNTGGCTACGNATGCAGTGCAGAAAAAAGTA

GCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGCTGNAA  
CAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCGC  
NCATGGCCGACTTNACCATTATGTCACAAGNAGGATGNCAGACCCCCGAGGTGTAGCGAGCGAGCGGGAATN  
NNATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTANGAATCGCAAATTGAGGNCGCTGACAGNCAT  
CCACTGCCGTGGCAAGTGTNCGTCNTACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAGGTG  
NAGGAGCGACAAGCCNACTGGGGCTTCGGACATTGATNTGGCTGTNACANNCTGGCCGTATACTNAAGT  
TNNGATCGTGACCAAGAGCCCCGTACNTCCCCCGATGCCGNACCCAATCCAACNAATATTTNACGCCANN  
NACCGCTTCACAAAATGGACCTGCAGACGANTGAGCTNNAGCGTACCCCANNGAAGGAGCCGTAAATNAC  
CAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGANAAAGCGAGCGTCTCCGC  
CGACCAATTGCCTTCNCGAGTGCCGCACCCGGTCTGCGCANTAGAGCATGTGGACCNGAATGAACGACGAG  
ACCCCGTGAACCTTCGGTAGCGCAGTNGACCTTCCGNTGGCGCCATCTGTCCGACCANAAGNGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTNATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACC  
AAAAGATAGGGACNNNGTAGGTTTGTACAGTTAATAATGACAACGCCAGNGCTGGATACGAAGTNACGCC  
TCTCGAAAACAGTGAGGTACNCGGGGAGATGTCTCAAGTCNNGGGGGGCGTCTTAGGAATCGCGGGTGANG  
CCCTNTAAAGGGAGATGAGGAAGGAACAGCGAGCNGGCTATCNGTTGAAGTTATAGGTCAGGCTCNGGCCG  
TAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATANCNGTGAGGAGCGCTGTAGAGGAAGACT  
AATTCCTGAGACGCCAAGGCGACGCNCGCATNTAGGTACCAATCGGCCCTATNCTATCGATGAGGAGTGCAC  
GGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATNCGNGGCGAGTGGGGTANAACACGGAGAGGGTG  
GNACGGGTGGCGTTNCTGGGTAACAAGGANNGGAGCGGCTCGAGCGGTCCNTGAANNNGGTTGATGTCAA  
AGTACCCNNAGACCAACCGANGTCGGTGCTGGACATAGNTNANCACAGTGCCGCCAGGGGTCNGTAGGTGC  
GTGACCTACAGNGAGAAGNTCGGAGGAATTTCCNNNNNNNNNNNNNNNNNGCGTTTCTCCGGACACGA  
AACCNCGAAGAGGGGTAGCGGACCAAAGANANTGTCGGATGCTCAAGAGACTCCGACTGACAGCGCACTAG  
CAAGTANNACCGATAGGNGTACACCTTAGGGGCACGNAGAAGTTGGCGNGGACCTTGTGTGTTACGGTGG  
TGGCCAGCTGAGGTTGCGGATGTANCCCGACTATACTAAGAACCGCTCTGGACTGNCCAAGAAGGCNACGCA  
AANGAAACCAGACCCCACTGACTGGTCCGNTTTTNGGGTCCATTAATGAAATACGGACGAATCCGATGC  
CGTTCGNTACAGCNGGGGGCNCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGNNGCAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTCTGNNAGCCNGTGAATACCTN  
CAGACGGATTGCGCACGCTTGTATCATGCCGTCCGCCAACANCGGAGCAAAACGGTAGGCGANGAACAA  
AGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATNGGGGTAGGCAAACAT  
CGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGNGTGGGGAGTATAGTAAGAAACCTATGTC  
ATGGACGNGGTAGACCAAGCAAGNTCCNAGGAAGCGAGCNAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGNTNGCCGCTNNNAGGNGGAAGTGCGGCGGAAGNGTCTTAACNTTGCAAGGGACCTGAGCGAGGGC  
CAATACCCAGCTAGAGGTGCAAAGNGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCNATNTTAAAG  
CCATTATTTGGNAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGNCGAAAGGCAACAACNNGAAAAG  
CTGGCGAAAAGGCGGTGNCAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATNAAGGCGCAGAATAGTGTACAGGCCANAAAGCGAGTTACACCGGGNNGGAANGGAGCCAGAA  
CATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCNGTANTATTANTGTGTGTGGCNAGACGGC  
NTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTNGTGANGGCACGCGCTATCTAGGGGCTG  
GTAAGAACTTTAGGGGNAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATT  
CATGCGCGCTCGTGTGCGCAATTNCGGCTAGGAGAACCNNCGTNGACANACGAGGGTACAACGCCGCCGT  
ATGAGAGCCCACGGGGGAATCCTNGCCTGCGTGTNGTGGGCGGGTGGTTCCATCCCNACCGCCACGTAGC  
AGAGCAAGAAGTNGCTTGTNACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGT  
ACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGNGCAGACGGTACGTCTGGCGCGGACAGAAGTAGT  
TNGCTAAGCTGTGGTGCATGAATGCTGCCCTAGCNAAAATCTTCTAAGATTGTCGCGACGCAATTTAGATTTGCT  
GCCAAGAGNATGNNGGTGGGACGGCAANGGTTAGGGTTCGTTAAAGTGTTCACGCCGAACCTGACGAATAA

AACGGCAGCCTGCAAGCATTATGAGATGGACAGCNCNNGGCGCTGCGACNNNNNGGNNNNNNNNNNCC  
CNGTGNGGACTTTAATAGGCGGAGGTCNNGNCACTCACTTANCGCAGGATANGATTGNNGGGCGGAAATCT  
CCCGTTATAAAATCCAGGCTGAANGAGTGANCAAGAGNGCNAACAAACGACTCAGGATTCCGGCAACNATA  
CCCGACAGCGNCGTCAGTTGGGGAACAGCGTCGCTACNCTGTATTCTGCCCCATANNCTTGTGGGGATCGGC  
CGAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCANGCCCTTANAGGAGAAAGATTCTGCACNA  
GGGCTTGCCTAGCATTNATTTCTTTGCTTAGGCACTTCGTAGTGGGTACNGATTGANANGAACGAACT  
GAACGTGGACAAGAGAGATNTGCGNACGAGACGAGAAGCGCTTCGNNNNGCANATTCGGNGNAAGGCGG  
TCATGATANTATATGGGGCGGGGTGAGGGAAAATGTAGCANGCTTCTCTGGGCNNNTNGCCCTTAGGCCGT  
GACTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGN  
GGTACCATNGACACGCAGACAAAAGACACCCCATTTGTCGCTACAGAGNGTCTCATTGTATGGTGCATACGC  
AGNGACTCTCAGGTTCCAATGGCTGNNCATGTATAATTNGANAGAACGTAGTTCAGGGAAACCGCNAGN  
AAACCAGTACCCCGCTCCAAGTNCGACCAGTTTGGTGCTGAGGTATCAAATGCTTCACGGACGATTGAGA  
AGTTTNGAGGAGNNCTTGGCATTCAAGCTATNTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGT  
GTCTAACAGNAATGTCCTAAGGCCAGNGGCATTAAAAATATCTCGACCGGTGGGCGGNGAAANAGTGAG  
AAATGGAANACATTCCGCGNNGGGTAGAGCAGCGAGTAAAGGTGTNATAGNTTAGGCAGACGCAAGGACC  
ACGGGGGCATGGAAGATTGTCACCATAAGCAGGNAACNNGTGGTGTTAGGTAGCGAGGGCCCAAAGGANG  
GACCCGGAGTTATCATCTACCCCGCAGGGGNGAAAGTTCCNGAANCNAGGTATGAGGANAAACACACCAG  
AGCATCTCAGAAGACGGTGGNNACTGNNTAATNTGATGTGCNAACAGACCCGTGACCGTGNCGAGGGTTGC  
ACGAAGGAAGACTGGGAGAAGTACGCTATCAGGAACTATGTCAGNATACAGNGGCNTGNGCCTAAGAACG  
AGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCC  
CATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTNT  
GGGACCTAAACTCAGTTAGCANGNNGGGNGGAAGAGTCCNTACCCTAGTGNCAGCAGATGACGTGTGGGT  
AGCCCCGCGCGTGNAAGGTCATAGCTATTTAGNATCCCTAGCCACAGATCTNGTCTTGCCGACTCATCTGG  
CACCTTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCNGTCTAAANGAGGAACGGGCAATGGC  
CGTGGCACGTTGGGAGTAAGAATGTCACACGGAGNCGCGNNNGCTTTTGAAGGTCAGAACNAAAGGATAT  
GTATGCCACTCCCCGATGAGAGCCTCTGGCGNCGCCCCGNNGAAACTATGTACGANAACAGCACCCGAAC  
GCCTGATTGGTAACGGAGCCTGTATTCNAGATGTAAAGGTCTGGAAGCTAGGGAAGGGNAGAATTGCACGT  
AGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTGTGACGGGGAGG  
CGACGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGANAACGCTGGGACNCATGTTTAAAGGAAGTCCAAC  
AAGTTCCGCGCTTTGCAACTGGGCATAGNAGCATATGCCAAGTCAAGGTCTCTGCCGACANNAGACCGGGG  
AACTGAGATAACAAGGATCGTATGGACCCTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACNCAGTG  
CGTGCTTAACCGGTGACGGAAGTTAAAGTCCCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACG  
TACTGTACNNNAGANNANGTAGNGCCGTCTAGCCNTTACTCANNNCCCAACAGTTCCTCCCGTNNNG  
GNTAATCGACCCCTGCGCACCGAAGGAAATTTCTCGGGCNGTTACCNAAGGCTGACACCCGCGNAACAN  
GATNTTGNACGCGGATCGCTGNGGAGTAGGGAATNNNTTGGCCGATTCTGGNGCAAAAATCTGGCGCCGC  
GNTNGAGGCAANGNANNCTTTGTGTTAATGTGACGAGGTNAAGCGCAACGTGTTGATTGGGTTGCGATCAA  
NNAAGGTGATGGTACCTGGTTAACTNCAGGTCCCTAANGCTTCTGCTCNCGGCATTGTTGAGGGTTGTAN  
GGTANAAACNNNGCAAAGAGAAACNACGTAACGATCTGGTTNGAGCTCTTGCTATACTGACNNATGACTCA  
CCTTTGAAAGTACGCGCGGNNGGATCCGNCGCCCTAAGAAAAGCGATACNTCGAGTGTNNGTGGTGCANCC  
ACCCAGATTCTAAGTNTGGAGGATACACAGGTCCGAAGGACGAACAGCTGANAGTGCAAGCACTANNGNC  
CCCCAATGACCAANCTAGCTGGANTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGC  
CCAACGATNATGGCTTGCAGGGGAAAGGTCCNNGGCGGTCCAAACGNCTCCCCTTCGTGGTAAACTGTACC  
CAGNATCCNTNTCCCCCTCGTAATGAGGAGTGTGGGNGGAGACAGTAGGNAATCAACGCGCTCAGANAAC  
GGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTNCGCAAGAAAGACTAAAGGTGAGCAGNCGCTGG  
GAANTGGATTGCGNCGTGTGGAGATAAGAGCCGACNCTGGGTCTAGCGGGTGATCGAGAGAGTGAATGGG



GCTGGCCATTTAAGAACTGATTACNGCTATTTTNCATGGAGCCGCTCANNNGCNGGCTTTCCTTAACGGGTGA  
GCTGGATTATGGCNACNCCGGAGACNCCAGGCCGCATATTNTGAAGCCTATACGGATNGATCCTNAGCTGGT  
AGAGCGNAGACCGACNNCATAAATCCAAGGCAATCTACTTCTATTCAGGGTGGNAATCGCTGCTAGGCA  
CCGGCGGGCCAGAAGGGAAGGGACNGTTATNATACTTACCCGGTCAAAGCGACAGACCCTCAGACAACG  
TCTAACCACGACCCAGNGNAGTGGTACCCAGATACTGAATTNCCAGGTGGAACATCGAGNGGAGGNNGGC  
ATAAGATGGNAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCANGACATGCTGTGTGAGGAACGCAT  
AGTNGTGAACCCCTGNCTGTTTTGCGGTAAGTGGTNTNAGCACACCGTCTGGGGTGCGCCAGAACCGT  
GAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCNGGCATCGAGAAGGGCGGTTGGCGGCGTGACTAC  
TATNNNTGAGAAGTGGTCACTCTAGCTGAANATACCACGCAAGGAACCCCTCTCTCGAATTNGATTAGGGCG  
CCCCAAGCGGGNCACTACGTTGATGCTCCANACTGANGGAGCCGGGATAGAAAAANAGGCAATCCAGCGA  
TCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGGGGGNTCCCTCAAATCCGCACNCAG  
GTTNCCCCCGCGCGCNGCACTCTNGTTATTACGATCTTCTGCCTGGATGCGAGANCGATAGTTGTCTGCGT  
TAGCTACTCAGAGGTCAGTTNATCTCCTNCCGCTTGTAAATCCAAGAGGAGTGAGAGNAGGCCGACGTTTAT  
GGTAGGACGAAATGGGANGAANAGTATGCCTATAACACCTANCAGCAGACATTGTCGGCTCCGCAGGGCCG  
GTACGGGAAAGAGGGGGACCAGCAGNCGTTTGGCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTA  
GGAGGATGATGACAGGGCAGAGCCCTANNNGNCGGTGTGAAAATACTCTCATGTAAAGAAGAGGTCCTT  
GACACGTTTTGAGGGTNACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCNGCCGTGAGANGTG  
TGATCTACCTAGTGCCNTGTAGGGTACAGAGTNACCAAGGTTCCGGATCAGGCAACCAGGTCAAAGACGTCT  
ACGGGCGCCCATGGGTAAGCGGTAATCCNTCAGCATCAAAGCCTTACGTGGGNGCCCGGTGCCGCCANGGT  
GGGTTGATGTGTCTGGGACTCCNNGTGCACGANTTCCCTNGCTATCCGGCTGTNGCCATAGCGACCAAGTAG  
ATTGTAGCGAAAAACTCGGAAGACGTGGTTTTGATAGGGTAGCGTCANAGGCCGCTAAATGTTATACTAA  
CANAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTNCAAAGACGATACGTAGA  
GCTGAGGTGCTTTTTGTTANCCNNNNANCAACAAGNAAGCTACGCTGTATCCGAATACGACCTTACACGGNN  
GGTGNGTNGCAGGNGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACNGCTCACTATTGATGG  
GTGCCGNGGGCGCGCTCACACGGCGTGGNCTTTGNNCTGCTCTGGACTAAGGGCAAAGGGAATGGACCC  
GTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTACNATACG  
GACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAG  
GAGGTGTNAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGNACAAAGAGCGGGCAGTGCAT  
ATCCGTCCTAANAAGGCGGANGAAACAAAGTNNGTNCCCNACCATGCGATCCTTGGGGGTGCGAGGAAG  
ATGCAGGNCGTCTGCAACGTCCAGTGGCACTGTTAGTANGCGAGCCACGCAGCTGCAGGTGGGGGACGAGC  
GGATTACGCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGNATGGTATGTATTTTCATCGANGTGACAA  
ACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCNACCTAGCTCGTAACGTGGATGTACAC  
AATAGCGAATGGTGGGTCGGTCTTCAGGCGAAGCANCGTNNNNNNNNCCGCCGATAAGATACCCGCAA  
GAGTGCNTAAAG

>E2, London\_17, VIM, 12.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACNNATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGG  
AACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTA  
AGACATTTAACTGCAATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCT  
CTCTCCGGGACTGACTCTGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCNCCCCCAGTTTTCGCGCCTCTACCGAGCT  
TATCNTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCAACGGGCTTGGAGTGAACA  
GAGTGAATCTTCTGGGGGATTGTTTGTGTGCCCTTTCGGGAGGGTCTTCTCGTCTATTCGGCGCTTGTCCAC

CGCCCCTACTCGGTGCGCCGGCTGGAAAGCTATATAGGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGAT  
CAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATG  
TGCGCCTACTNGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGNTTC  
TGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTCCGTTGTC  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGCTCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCNACGCATAGTCGTTGGATACCCA  
GCCGATCTGGATCTCCATTACATTAACGGCCTANGCNTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTT  
GCTCGTACCACATTCATCCTCCTCTTTAAGGAGGGTTGGGCCCGCTATAGGCGCGCCTNAGGCTCGA  
CCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTA  
TCCTCGATACGCAATGTAGTTCGAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCC  
ACGAGAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTTGCCTT  
TGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTTGCGAGTCCCGTCCGTGACT  
CACGAACATTTTTCGGCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
GTGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCC  
ATATGATCTCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGT  
GACGATCCATATAATAGCGTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTGCGA  
GGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCT  
CCTCCTCGCAGGTAATCTTTTCCGTTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGC  
TCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAG  
TTAGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCCGCGTACGATTGCTAAGATATCCAT  
TACGCGCTGTCGTGCACTACAGGATACGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACC  
ACCGACCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTT  
GTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCNATACCGCAAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGTAGCCCCTATCCTTTCCGCATACCAAAC  
AGATTAGTCAACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCAT  
CCTGTTTCCGTTCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCTTGCCTTCGTCGCGATAGCGTAAATTTCTTGTAGGCCCCAGGCACTGCCTACAGATTACTAATGAT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTCAGGTTCTTCGTGCCCGTT

TGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCG  
CTTTTACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTNCGG  
GGCTGTCCCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGAT  
GTTAGGTTGCGCGTCTGAGTTTACTCGCAACCAATCACGGGCTTTAAACCCTGCGTATCCTCCAAGGCGTTTC  
GGTGGGGCGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGNACACAAGCTAGTCTCTCCATTCTAGGCG  
CGCGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGG  
TGCGACAATACCGAAGCCTTGAGCTAAACTGGCNATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCA  
TCGTTGCGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGNATACATTTCTTCCGCCTT  
GGCGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTC  
CGGCGCTCATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTAC  
CCAACGCCCTAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
ACTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGT  
GTATCCTTAATCGTACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCAC  
TGACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAANCTTGAGATCGCCGTCGGATTTGCTCCCTACGN  
TAACGCGCANTACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTCTCCGTAGTCTCACGACGATACCA  
TATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGG  
CATTCTGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATA  
GCTAGTATCTGGGGTGAAGCAGCGCCTCGTCCCGTTTTTCTGTTTNCNACTGTGCCACTGACGTTTTACGA  
CGTTTGTACTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC  
GAGCGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCC  
ATTGACCCTTGATTAATAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTG  
CTCAGCGATGCTATTCTACGTTGCTCCCGGTGANCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCC  
GTTATGTGCGAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTCA  
CCCCCGCCGTCGCCCCTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTTACTA  
TGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCT  
TCTCTTCCACATCCCCNGATTACCAAATTCNCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGT  
TTCCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAG  
ATAAATTTAGATTTAACGTAAGAAGGATGNCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTA  
CCATTGCCCTNATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTNNGTTCGTCACAGAC  
TAGGTTAGGAACCTATCCAGTACCTCTTCCGTAACCTGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCG  
AGCANNATTAACCGCTGGGTAAGGCGCACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGA  
CTTTATACGCGCCCCGCTGGGCCGTCGCCGAGAGCGNATAGCTCCTCATAACCCTGCAGCCACGNNGCG  
GTCACTACGCTCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCNTTGGACCCCGAGGGGTCCCGACGT  
ACCTTACCCANNTTAAGGCCATANCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCNNGAAGTCTCGCTTCG  
GGGATCCCCGCACCGCCACGTGTGGGATNNNNCGAAANGTAGGCGTGTCTGCGCGCNTTGGCCACCTGG  
ACTTGAGTCNCGACCTCGATNGGTCAAGCGAGGGGTANCCCTGCACATTTTCTCTGACCCACACAGGGGAA  
GTCCTCCTCCGTACGGGAGAAGAATAATTTTATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGCTCTG  
CCANCACACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCTCCAGTCTCGAATCTCCCGGTC  
ATCATGTCTCTCGACCCNGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCC  
ACCCATCGAGTGTGAGCCGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAAC  
CAATTTTGTCCGGACAACACTCAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTA  
GACGGGTAACAANTTGACCCATCGCTGGGACCACTTATTACTACAGTGTCCAAAACCGTTTTCTGATGAC  
TCGTTTACTGTAGGCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGA  
TAAACGAGTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCA  
GCTGGGATTAGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCNTCC

AGATCATTAGCCGANACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCTATTTGGTGATACAGTC  
CGCAGTCTACNCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGC  
CTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTNGTTCAGCGGGCACTACTAATGGTACCAGTCCC  
CGCATCTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCNAAAGAGTGCTAAAGC  
TTTCTAATTCTTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGT  
ATTTGTACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCCTGGATTGGGCGGCGCTA  
GTGGCTTACTATTGCCGTTGGTACGACGNCGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGA  
TGGTCCATCCGCGTGTCTATGCCTTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTTNTTTACTACAA  
CNATCCGTTTCNGNCTGCTCCTCCTAGTCTGCGTCTGTNGATCCTTATGCACAGTATAAACGGCTGACTCAAG  
GTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAANTGTTCCGAACA  
TCCAATGATGCTTTTCAAGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATG  
ACACTCGCAGTGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATCCGCTGTACCTTACTC  
ACAACATCACCATGAGGATCNGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGC  
AATACATGGGGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGAC  
NGCTATTAAGCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGC  
TCGTGAACAGGTCAAGCTGTNGGTTNGTGGCTAAGAATTGGATGGAGGTTCCGCCTGCTNCTCTTCGCCGA  
GCTAAAGAAACCGGAGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTA  
GTCGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCC  
ATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCCTACCAAGCGT  
TGGCACGTCACCTACCCCGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACA  
CTCTGCCGAGTTGCTAAACTNCCCTCCGGTGAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTA  
CCATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGNCCTCCCATGATTACGT  
GTACGTGCCCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCG  
AACACCTACAAAGAAGGAACACCGCAAGTTGCGTGACGGTCCGTGCTCNCTCAGTACCCTTCTAGTCACTG  
AGTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCNCCCC  
GCTTTTTGGGCTCTAGATTTGGGGGCTCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATACGATA  
ATCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGC  
GCTGTCTACATCCATGGCGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATANAGAAAGCTNNGGGCA  
CCAGGGATTGCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGA  
TCGAAGAGCGATAGAAGTACGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGT  
CACTGGTGAACGCTTCGGGTGCCGCNAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGG  
CCGCCGGCGNTTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTNTGACCCCATGATGGGGAAAG  
CACGGCCTAGCCTGACGGATNAGTCGTCTAACCGGATTTTATGTTTCGCAAGTGGAAAGTCCCCGTGAGCAC  
TTCTCTCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCC  
CGATATTGAGCGCTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGT  
TCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGT  
AAAGTGGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAANCCTGACGGTTGGGCTTCTCA  
NAGCCCAATGCACAGTACGCGTGTGTAGAGGGGAAGCCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTT  
GGCATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGAC  
AGTTCCAGCACATGACATTCGCCACAAGCTCTGCCACNCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGA  
CCNGGTGCGAGTAGGTCCCGGTTTCGNATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATC  
TTTTCTATACTCAATCTGAATCTTCTAAGCGAGNATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCT  
CGCTCCGTAATATGAACAGCCGGCGTGCGCCGNAAGCTACACAAAAATCTNTAGGGTATTCGCCG  
AGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGACTCAACTCAGCCGNAG  
ACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTAT

GGGGTCAGAACGCCGATAGTGGCGCCCACTGAAGCCCCAAGNTGCTTTGATAATCCCGGACGNNGGTATCA  
ACAGCCGACGGGTCTTTTTGAGTCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAA  
GGGTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGNGGACCGGACATAGCCATTCAATGGG  
CTCTCTCGTTCAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGC  
CAGCGGCCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGT  
TCCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTNCCACGCCCCA  
AGGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTANANGCAGAAAGGGGCGAC  
GGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCA  
AGTCGGATGAGGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTAC  
CGCTATTCTGGATAGGAANGAAGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGANAGGAGCTG  
GATGATCAGTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCAC  
GTCTCCCTAGTCTACGCCNACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCT  
ATACACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCT  
AGGCCTTCGNACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACG  
TGGGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCCGATTACCAAC  
GACGCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGC  
GCCATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGCCGAAGACTCTGAAAACGGCGTCNTGTACGA  
TTCACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACAGAAAGCACGC  
GTGCGTTCCGCCCTGACTATCGACCCGCGTGCTANCAANCAAGCATCCCACAAATCANGTCNAGTANACCCTC  
CTTTGTTCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCA  
GGCGACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCCTTTTTGACTGAATCGCGACCTACTT  
GCCCCGATGCATANAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAGCTG  
CGAGTACTACCGCTACGTGGCCATTTCCCACTGGCACAGNCAGCGCCTGGGGGTAGTGGCACGAACGTTCT  
ACGAAAGAGTCNCCGTCTAAGGNCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCAT  
GCAAGGCGATCGGAGTCCCCTTACAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGC  
TTAACTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCNTGG  
CTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTA  
CCGTCATCAATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAG  
GCGAACGCAGGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCC  
GAGGTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCNTAAGAAT  
CGCAAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGT  
AGCCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTT  
ACAGCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAA  
TCCAACTAAATATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCC  
AAGGGAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAG  
GGGAAAAAGCGAGCGTCTCCGCCGATCAATTGNCTTCGNGAGTGCCGCACCCGGTCTGCGCATTAGAGCAT  
GTGGACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGT  
CCGACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACAC  
CGCCGCTTTAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATNACAACGCCAG  
AGCTGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCG  
TCTTAGGANTCGCGGGTGTATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAG  
TTATAGGTCAGGCTCGNGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAG  
GAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATC  
CTACCGATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGG  
TAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCA

TGAATCAGGTTGATGTCAAAGTACCCGNAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCG  
CCAGGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCG  
GTTTCCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCC  
GACNGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACC  
TTGTGTGTTACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGA  
CCAAGAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTNTTTTGGGGTCCATTAATGAAATA  
CGGACGAATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGG  
CTATGGCGTCCAATTAGTCTTACACCTGCCCGAACCAGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTCA  
GCCAGTGAATACCTGCAGACNGATTGCGCACGCTTTGTATCATGCCGTNGGCCAACAAGTGGAGCAAAACNG  
TAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGG  
GGTAGGCAAACATCGGATGGNAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGT  
AAGAAACNTATGTCATGGACGGGGTAGACCAAGCAAGTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCT  
AAGGGCCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGAC  
CTGAGCGAGGGCCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGTTCANTGAAATCAATACCCCTAAGAC  
CAATTTTAAAAGCCATTATTTGGTAGTCGCGACAGAGAACTGTCTGGACCGACANTGTGGCGAAAGGCAAC  
AACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGT  
ATCAGCAGGCAAGAAATGAAGGCGCAGANTAGTGTTACAGGCCAGAAAGNGAGTTACACCGGGAGGNAAT  
GGAGCCCAGAACATGGCTATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGT  
GGCGAGACGGCNTTCTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTA  
NCTAGNGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTG  
ATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACA  
NGCCGCCGTATGAGAGCCACGGGGGAATCCTCGCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCG  
CCACGTAGCAGAGCAAGAAGTTGCTTGTAACTGACACTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATG  
CCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGAC  
AGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATT  
TAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCT  
GACGAATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGC  
ATTACCCGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGA  
AATCTCCCGTTATAAAATCCAGNCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCCGGCAACC  
GTAATCCNGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGAT  
CNGCCGAAGTACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCA  
CCAGGGCTTGCCTAGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAA  
ACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGNCG  
GTNATGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGNCTTCTCTGGGCTAGTTGCCCTTAGGCCGT  
GACTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACTG  
GGTACCATAGACACGCAGACAAAGACACCCATTGTCGCTACAGAGGTGNCCTCATTGTATGGTGCATACGCA  
GTGACTCTTCAGGTTCCAATGGCTGCACATGTATAATTGAAAGAAGCTAGTTCCAGGGAAACCGCAAGAAAA  
CCAGTACCCCGCTCCAAGTGCAGACCGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGT  
TTGGGAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGNCTGCATACGGATGGTGTCT  
AACAGCAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAAT  
GGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGG  
GGCATGGAAGATTGTCACCATAAGCAGGGAACNTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGNGACCCG  
GAGTTATCATCTACCCCGCAGGGGGGAAAGTTCCAGANTCAAGGTATGAGGATAAACACACCAGAGCATCT  
CAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGG  
AAGACTGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCNTGGGCCTAAGAACGANCCAG

GATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGT  
AGCTCCGTCATAACCCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCT  
AAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCT  
GCGCGTAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTA  
GCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCA  
CGTTGGGAGTAAGAATGTCACACGGAGNCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCC  
ACTCCCCGGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGAT  
TGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTA  
GGTACCACCCGCTGGTCCACAGGANACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCT  
TAGATGTAGTAGGCAGCCCTCCATTTGTGANAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCG  
CGCTTTGCAACTGGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGAACTGAGA  
TNCAAGGATCGTATGGACCCTCAAGCCAGTCTAATCGAAGGAATTAAGATNCTATCACACAGTGCGTGCTTA  
ACCGGTGACGGAAGTTAAANTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGT  
ACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCA  
CCCCTGCGCACCGNAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAG  
CGGATCGCTGAGGAGTAGGGAATAAGTTTGCCGCNTTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAA  
AGCACCCCTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGG  
TACCTGGTTAAACTACAGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGATGGTAAAAACCCAG  
GCAAAGAGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACANATGACTCACCTTTGAAAGTACG  
CGCGGAGGGATCCGCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGT  
GTTGGAGGANNCACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATC  
TAGCTGGACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTT  
GCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCT  
CGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTA  
TAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGT  
GGAGATAAGAGCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGA  
TTACAGCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCG  
GAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACAT  
CATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAG  
GGACGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCCAAGTGA  
GTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATNAGATGGAAAGGAGCTGAA  
CGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTT  
TTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTANAGTGCCAGCAGAGTAG  
CTGCACATCTCCCTCNGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCT  
AGCTGAAGATACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTG  
ATGCTCCAAACTGATGGAGCCGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGA  
AACGAAAAATCTACTCCGACGGGGGATCCNTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTT  
GTTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTC  
CTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGT  
ATGCCTATAACACCTAACAGCAGACATTGTGCGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCAGCAG  
ACGTTTGGCCGAGAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCT  
AATGAGGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCT  
GAGNTAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCTTGTAGGGTACAG  
AGTNACCAAGGTTGCGATCAGGCAACCAGNTCAAAGACGCTACGGGCGCCCATGGGTAAGCGGTAATCC  
NTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCA

CGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTT  
TGATAGGGTAGCGTCAAAGGCCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTT  
CTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAAC  
AAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGA  
TGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCC  
TTTGNCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAAC  
GACTTAGAGGAGCTCCCGCACTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTCCACCGTATAAGT  
GAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCG  
CCGTAAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGANGAAACAAAGTGA  
GTGCCCCAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTA  
GTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTAGCCCGTTAAAATTAAGTGGCGGCTCGGG  
GTCCCGACGCATGGTATGTATTCATCGAGGTGACANACGGTGAATGGGTTACGTTCCACACCGTGGGCA  
GTTTCATCGGCTACCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGC  
ATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P47, London\_12, VIM, 12.12

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTNTTGAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTAAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCCT  
NTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGNAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCNNTTLAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTNTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTG  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTNGATACCCA  
GCCGATCTGGATCTCNATTACATTAACNNCCTATGCNTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA



ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCANATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTA  
TCCTCGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCC  
ACGAGAGGCCGGTTGATTCAAGCTCTCTACGGTAATTTTTTTGTGCCGACTGGTGC GCGTTTTGCCTT  
TGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGC GAGTTCCCGTCCGTGACT  
CACGAACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTTGTA  
GTGTTATCACGCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTCGCC  
ATATGATCTCCCGCATATAAACAACCTCCTCAGCTCGCTAAACAACGTGGCACAGTCCGTGAGCTAGTATCCCGT  
GACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCGGA  
GGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCNATGCGGACTGACTCCACGCT  
CCTCCTCGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCACGCTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGC  
TCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCNAAGAG  
TTAGCTTACC GCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCAT  
TACGCGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACC  
ACCGACCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTT  
GTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCNAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTTCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCCTANCTTTCGCATACCAAAC  
AGATTAGTACCCTTCGATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTNCTCCTGGTTCGCAT  
CCTGTTTCGGTTCCTCTTGTAAACAACAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCCCTTGCCTTCGTCGATAGCNTAAATTTCTTGAGGCCCCNGGCACTGCCTACAGATTACTAATGAT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTT  
TGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCG  
CTTTACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCNGGCTGCTCTCGTTTCCGG  
GGCTGTCCCTAATAGNTGTA CTGATCAGAGTGCTTCCCTGNTGGTGTCCAATCTCANNCACTATGTCGTCAGA  
TGTTAGGTTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTNNCCCTGCGTATCCTCAAAGCGTTT  
CGGTGGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGC  
GCGCGATTTACCCTTGAGCTTNAAGAGCTAATCCCGGGGACTNCAACAGCATGAACTGTTTTAGATGCGGG  
GNGCGACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGC  
ATCGTTCGGTCTAAACAACATATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCT  
TGCGGTGCCCCCTCTCGTNGCGTTTATTCTTGGGTTCTGCGNTTCTCGTGCCCTTCTCGGACAACACACAC  
TCCGGCGCTCATTGCGGCGTGCCCTATGGNTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGT  
ACCCAACGCCCTAGCCTGCCCTTGTAGCCGTCACTTTAATCNTGAGGGCTNAGCAGCTGTGCGCCAGAGTTT  
GTA CTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGA  
GTGTATCCTTAATCGTACGCGGATGGTCTGTAAAACATCGGGACCACCCGCCGCATCTTATCGATACCCGC  
ACTGACATCAGTGCTTCCCTGTACGCCGAGTNTCNGCACAAAGCTTGAGATCGCCGNCGGATTTGCTCCCTA  
CGGTAACGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGNGGCTCCTTCCGTAGTCTCACGACGAT  
ACCATATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTNNTTGTAAAGCTCAATGA  
AAGGCATTCTGTGATTCTAACCAGNTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTG  
CATAGCTAGTATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCNTGTTTACACNNGCNCNCACTGACGTTT  
TNCGACGGTTGTGTA CTGTTGATGCTATCGCTTTTTTCTTCATANGTAAACATAGGATTGTCAATGGAGGG  
GGTGC GAGCGCTCGGCCGACCAGGGCCACCCTCGCGGACCNGCTTTGTGCTGCGGCCTTCCCCCAATATCT

TCTTCCATTGNCCTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCT  
CTCTTGCTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACA  
GATCCGTTATGTCGAAATCCCCATTAATACACGTA AACTACTAGCNTACTGAGTTTCGACCGGCGGCTCACGAC  
GCTTCAACCCCCCGCGTCGCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCT  
TACTATGAGTAAATGTACCATTAATCN GTGACGCCATTGGAGGTACGGATTGCGGCGACGGATCTTAGCTG  
TGCCCTTCTCTTCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAAT  
GTCGGTTTTCCNTNCTCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGG  
GTCAAGATAAATTTAGATTTAACGTAAGAANGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACA  
AAATTACCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCC  
CAGACTAGGTTAGGAACCTATCCAGTACCTTCCGTA AACTCGCTGGTGTGCGGCTTCCCTNCCAACTATTGTAA  
TGCGGAGCACATTA AACCGCTGGGTNAGGCNCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCG  
GGGACTTTNTACGCGCCNCGCTGGGCCGTC CCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACG  
CGGCGTCACTACGCCTCCN TTTAGACCCTCTCGTAAATGCTGGGGANTCTCCTTNGACCCCGAGGGGTCC  
CGACGTACCTTACCCNCTTAAGGCCATAGCTGTGNNNCTNANNCCNNGTATTTGTCCNCCCCCGANGTCT  
CGTTTCGGGGNTTCCNNGCACCGCCANNTGTGGGATCCACCGAAACGTAGGCGTGTNTGCGCGCCTTGCCG  
ACCTGGACTTGAGTACGANCTCGATCGGTCAAGCGAGGGGNACCCCTGCACATTTTCTCTGACCCACACAG  
GGGAAGTCTCTCCGTACGGGANAAAGAACTATTTTCATGTTTCGCCGTACNCTACGTCGATCAGGCTCGCCG  
GCTCTGCCAGCACACGTTGGTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTC  
CCGGTCATCATGTCCTCTGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATC  
ACNGCCACCCATCGAGTGTAGCCGGAGCGTGTTTCTGTATCATGCATGCTCCCGCTCTCGCGGTGGCAGC  
CGGAACCAATTTTGTCCGGACAACACTCAAAGTCTGTGCGGGGTACGACGCCCCCTCAGTAAGACTCTCGCG  
CTTGTAGACGGGTAACAATTTGACCCATCGCTN GGACCACTTATTACTACAGTGATCCCAAACCGTTTTCTG  
ATGACTCGTTTGACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTG  
GTAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCC  
ATCCAGCTGGGATTANTCGTGCCCGT GAGGCTTCTTTNNGCCAGTGTGGCCAGGGTGTTTTGTCTGACCT  
CCNTCCAGATCATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGAT  
ACAGTCCGCAGTCTACTCCAGGGTATTTGGACCATCAAGTCCCGTCACAAAGAAATACCATAAACACCCCC  
AAGCGCCTGTGTGTAGTGNCGCTCTGTTTTAGTAGCTTCATATCGTNGTTCAGCGGGCACTACTAATGGTAC  
CAGTCCCCGCATCTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTG  
CTAAAGCTTTCTAATTCTTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCG  
GCGTGTATTTGACTCNTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGC  
GGCGTAGTGGCTTACTATTGCCGTTGGT CACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGC  
NCGCTGATGGTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTT  
ACTACAACAANCCGTTCCGCNCTGCTCCTCCTAGTCTGCGTNTGTGGNNCCTTATGCACAGTATNAACGGCTG  
ACTCAAGGTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGNCTTCTACCCTCATTAAGTGT  
CCGAACATCCAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCG  
CTCGATGACACTCGCAGTGGACGTGCCCTT GCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTA  
CCTTACTCACAACATCACCATGAGGATCTGTTATTCCGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATAT  
CTGTTAGCAATACATGGGGAGAATCTTTGGTACTTTACGTATTCTGCTNNTAGAAATTTTACAGCGGTTTATA  
GGATTGACCGCTATTAAGCTTCTTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTG  
ATTGTAGCTCGTGAACAGGTCANGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTC  
TTCGCCGAGCTAAAGAAACCGGGAGCGGCAA AATATTGCTTGTATGTGACTGCGGGTGTATGTCGCCATGG  
GGCGGCTAGTCGACTCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAA  
GACCTCCCATTACAANNACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCATA  
CCAAGCGTTGGCACGTCACCTACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGC

GGGGACTCTGCCGAGTTGCTAAACTNCCCTCCGGTGCAAGGGTTTTGGTGCTACTCTGTGTACCAGGGG  
GTTATTTACCATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCAT  
GATTACGTGTACGTGCCCCCTGCCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCC  
TAGANCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTGTCCCTCAGTACCCTNN  
TAGTCACTGAGTACGATATTTGGATAGTTCATAGGCATNTATAANCTACGCACCCGAGTTAGCAACTCCTCAN  
CCTTCTCCCCNCTTNTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCA  
GCATACGATAATCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGG  
TCCTGAGCGCGCTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACAGAAAG  
CTGNNGGCACCAGGGATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGG  
GACATGGGATCGAAGAGCGATAGAAGTACGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTC  
AGGCTTTGTCACTGGTGAACGCTTCGGGTGCCGNAGGAGTGTNGCGAGATCGCATCAGGCCTGTCCCTACG  
TTGCGCTGGCCGCCGGCGGTTTTTTCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGAT  
GGGAAAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCN  
CGTGAGCACTTCTCTCCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCC  
NATACGTTCCCGATATTGAGCGCTTAACTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGC  
ATCCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTG  
CTGGCTAGTAAAGTGGCCTGNGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTG  
GGCTTCTCAGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCNNGGAGGGACGCGNGTCCACGT  
GCTCCATTTGGCATTGGGTGGTACNAAACCGCACTCGGCAAGCGCAGCTCTTGTGACGGCTGGGAAGGTT  
GCAAGAGACAGTTCCAGCACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGC  
CGAGAAAGACCAGGTGCGAGTAGGTCCCGGTTTCGNATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGG  
GTTGGGGATCTTCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGATAATCACCTCC  
ACGTTCTGCCTCGCTCCGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGG  
GTATTCCCGGAGCAAGTAACGACAGAACGAATACCGGCNAGGCTAGTCGTCTGTCTACTATCCTGTACTCAAC  
TCAGCCGAAGACGACGGACAGGGTCCCGGGCGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGA  
ATCACCGTATGGGGTCAGAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGAC  
GCGGGTATCAACAGCCGACGGGTCCTTTTGTAGTCCGCCCGGACNCCGTGGCGAGGATCCGAATTTGTCTCTC  
TGGTCTAAAAGGGTCCGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTNGACCGGACATAGCC  
ATTCAATGGGCTCTCTCGTTCAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTG  
AGCGCGGAGCCAGCGGCCCGACGACGGATCGGTGTGAGATNGACGTTTATCGTGTGGAAAAGAGTAGGGTG  
CTAAGGGGGTTCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCANATGTTGTAGTGCTAGGTC  
CCACGCCCCAAGGCTCTCGGCGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGA  
AAGGGCGACGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCT  
CGGGGGCAAGTCGGATGAGGTTGCCGAGACCAACGCCGACAGTAATTTCCATNGGCAAACCCTCCTCTT  
GAATCTGTACCGCTATTCTGGATAGGAAGGAAGTACGAAGTACGAGCCCGTGTCAAAGACAGCGACAGA  
CAGGANCTGGATGATCAGTAGCTACCGGGTACGCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATG  
AGGCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTAC  
GGCGTCGTCTATACTACCCCAACATAGCATGGTAAGCACTCAAAATCCATTGCCATTCGAACGGCGGCTAA  
GTAGGGGGTAGGCCTNCGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACC  
CCCTAGTACGTGGGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCGAGTCGGGCCCG  
TATTACCAACGACGCAGACCAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAATNGTCNTAAC  
CCCTGTACGCGCCATACCCCAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCG  
TCGTGTACGATTACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCA  
GAAAGCACGCGTGCCTTCGCCCTGACTATCGACCCGCGTGTACCAAGNNAGCATCCCNACAAATCATGTCCA  
GTATACCCTCCTTTGTNCCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATAT

CTCGAACCCAGGCNACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCCTTTTTGACACTGAATC  
GCGACCTACTTGCCCGATGTCATATAATAAAAACGAGACCCGGGCCCTACAGTTGTCGTGAAATGGACTTATACT  
CGACCACGCTGCGAGTACTACCGCTACGNNGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGC  
ACGAACGTTCTACGAAAGAGTCCNCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACT  
ANAGGACCATGCAAGGCGATCGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGAT  
AGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTT  
ACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGAC  
AGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGA  
GCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGA  
TGTCAGACCCCGAGGTGTAGCNAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACC  
GTCTTAAGAATCGCAAATTGAGGGCGCTGACAGCCNTCCACTGCCGNGGCAAGTGTACATCATACTACCAA  
GCGGTCCCAAGTAGCCTAACGGCGGGGNTAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATT  
GATGTGGCTGTTACAGCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGA  
TGCCGAACCCAATCCAATAAATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCT  
TGAGCGTACCCCAAGGGAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGAACCCGGGACAA  
TCAATTGACAAGGGGAAAAAGTGAGCGTCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGC  
GCATTAGAGCATGTGGACCCGAATGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGT  
GGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGT  
CGATTAATACACCGCCGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAAAAGTAGGTTTGTACAGTTAATAAT  
NACAACGCCNGAGCTGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGT  
CCGGGGGGGCGTCTTAGGAANCGCGGGTGTATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGC  
TATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCT  
AATANCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACC  
AATCGGCCCTATCCTACCGATGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCG  
AGGCGAGTGGGGTAAAAACACGGAGAGGGTGNACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGG  
CTCGAGCGGTCCATGAATCAGGTTGATGTNAAAGTACCNGTAGACCAACCGNGGTCGGTGTGGACATAGAT  
TANCACAGTGCCGCCAGNGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGGAAG  
TGAAGTAGGAGCGTTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGGATG  
CTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAG  
TTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCNACTATACTAAGAAC  
CGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAAACCAGACCCCAAGTACTGGTGGCGTNTTTGGGGTC  
CATTAAATGAAATACGACGAATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGG  
CCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAA  
GCGCGTTCGNTCAGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGT  
GGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTNGAAGGGGT  
GACGAGAATATGGGGGTAGGCAAACNTCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAG  
TGGGGAGTATAGTAAGAAACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAG  
TACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAAC  
GTTGCAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGNTCAGTGAAATCA  
ATACCCCTAAGACCAATTTTAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGNCCGACAGTGTG  
GCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGT  
GTAACGAAAAGTATCAGCAGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACAC  
CGGGAGGGAATGGAGCCNAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCNCCTCATNTAAT  
NTTAGTGTGTGTGGCGAGACGGCCNTCTCGGCATCAGAATTATTTGTTGTGCGGACGTTAATCAGCCTCGTGA  
AGGCACGCGCTATCTNNGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAG

CATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACA  
AACGAGGGTACAACGCCCGCTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTT  
CCATCCCGAACGCCACGTAGCAGAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATT  
GACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTAC  
GTCTGGCGNGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATT  
GTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGNTTAGGGTCGTTAAAGTGTT  
CAACGCCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGNGATGGACAGCTCCCGGCGCTGCGACC  
TCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATAGGCGGAGGTCTGCNACTCACTTAACGCAGGATACG  
ATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAG  
GATTCCGGCAACCGTAATCCCGACAGCGGNGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATA  
CGCTTGTGGGATCGGCCGAAGTACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGA  
GAAAGATTCTGCACCAGGGCTTGCCTAGCATTNGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATC  
GAAACGAACGAAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATT  
CGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTT  
GCCCTTAGGCCGTGACTATGATGANATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAG  
GTTGCTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGCCTCATTGTA  
TGGTGCATACGCAGTGACTCTCAGGTTCCAATGGCTGCACATGTATAANTCGAAAGAAGTAGTTCCAGGGA  
AACCGCAAGAAAACCAGTACCCCGCTCCAAGTGCAGCCACGTTTGGTGTGAGGTATCAAATGCTTCCACNG  
ACGATTCAGAAGTTTGGGAGGAGCTCTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCNGCAT  
ACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAA  
AGAGTGAGAAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGNAAAGGTGTCATAGTTTAGGCAGACGC  
AAGGACCACGGGGCATGGAAGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAA  
AGGAGGGACCCGGAGTTATCATCTACCNCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACA  
CACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGG  
GTTGCACGAAGGAAGACTGGGAGAANTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAA  
GAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGANCTGGCAACCAATAACTATGTCTTCTATGGAGT  
GAGCCCATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGA  
TGNATGGGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGNNCAGCAGATGACGTG  
TGGGTAGCCCCTGCGCGTGAAGAGTTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCAT  
CTGGCACCTCTAGCCCCAATGGCGGTGTGGNGAGNCCAGTAGTCTCCACCAGTCTAAAGGAAGAACGGGCAA  
TGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAANGTCAGAACAAAAGG  
ATATGTATGCCACTCTCCGGATGAGAGCCTCTGGCGACGCCCCGAGGAAACTATGTACGATAACAGCACCC  
GAACGCCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCA  
CGTAGATGTAGGTACCACCCGCTGGTCCACAGGANACGTTGACGCCCCGAGCGNTCGTAGTTGNGACGGGG  
AGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCC  
AACAAGTTCCGCGCNTTGAACCTGGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGNCCG  
GGAACTGAGATACAAGGATCGTATGGACCCTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACA  
GTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCG  
ACGTACACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCTCCCGTACGA  
GGCTAATCGCACCCCTGCGCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAA  
GATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTCCGCATTCTGGCGCAAAAATCTGGCGCCGCG  
GTAGAGGCAAAGCACCCCTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAA  
AAGGTGATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGT  
AAAAACCCAGGCAAAGAGAAACNACGTAACGATCTGGTTGGAGCTTGTGCTNACTGACAAATGACTCACCTT  
TGAAAGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCA

GATTCTAAGTGTTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCA  
ATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACG  
ATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATC  
CTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGT  
TGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGAT  
TGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCNTT  
TAAGAACTGATTACAGCTATTTTTTCATGGAGCCGCTCAATAGCGGGCTTTTCTTAACGGGTGAGCTGGATTAT  
GGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATNCTNAGCTGGTAGAGCGGAGA  
CCGACTACATCATAAATCCAAGGCAATCTACTTCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCA  
GAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACACGAC  
CCCAGTNGAGTGGTACCCAGATACTGAATTGCCAGGTGCANCATCGAGAGGAGGACGGCATAAGATGGAAA  
GGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACC  
CCNGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCC  
AGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAG  
TGGTCACTCTAGCTGAAGATACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAACGCGGGAC  
ACTACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGT  
GGGACGGAACGAAAAATCTACTCCGACGGGGGATCCCCCAAATCCGCACGCAGGTTACCCCCGCGCGC  
CGCACTCTTGTTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCA  
GTTTCATCTCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGA  
GGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGG  
ACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTGCTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGC  
AGAGCCCTAATGAGGCGGTGTCGAAAATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTAC  
GATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGT  
AGGGTACAGAGTNACCAAGGTTTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAG  
CGGTANTCCGTCAGCATCAAAGCCTTACGTGGGTGCCGGTGCAGGCAAGGTNNGTTGATGTGTCTGGGACT  
CCTTGTGCACGANTCCCTAGCTATCCGGCTNTGGCCATAGCGACCAAGTAGATTGTAGCGAAAAACTCGGAA  
GACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTA  
GCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCA  
AGTAACAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCCGTGTGTAGCAGGAGGTTGCGAG  
GTCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACG  
GCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTC  
TAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTAATAACGGACGAGACACAATTTCTCCCTTCCAC  
CGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCG  
GGCAAGTCGCCGTAAGTTTCTGTCGGACAAAGAGCGGGCAGTGATATCCGTCCCCTAACAAAGGCGAGGAA  
ACAAAGTGAGTGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGT  
GGCACTGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTG  
GCGGCTCGGGGTCCCACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCAC  
ACCGTGGGCAGTTCATCGGCNNCCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCTC  
TCAGGNNAAGCATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P35, London\_26, VIM-2, 05.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTNGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA

GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCNATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTTCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCNNCGACAGCTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCNTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATNTAATAGCGTTTTCTGTCCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGNCTCATCAATGCGGACTGACTCCACGCTCCTCC  
TCGCAGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAAATATGCCTTTAGTAGCCCCCAGCTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACG  
CGCTGTGTCGACTACAGGATACGGGTCTTTCAGGNTGTGGGTACATTATTGAGTGAATGCTGACCACCG  
ACCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTAT

AAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTA  
GTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTTCGCATCCTGTT  
TCGGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTNATCGGGATGG  
GTCCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCNGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGTCTTACCCTNGCTGCTCTCGTTTCCGGGGCT  
GTCCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTA  
GGTTCGGCGTCGTAGTTTTACTCGCAACCNATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGACGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTAATCTGAGGGCTGAGNAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATAACCCGCACTGACA  
TCAGTGCTTCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGTGCCCCGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTAACCAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTNCCTGGCGGACAGAGAATGTCGGTTTCTCT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGNATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTTCCGTAACCTCGTGGTGTGGGCTTCCCTGCCAATATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATA  
GCGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGCTACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCAGCTACCTTACC  
CACCTTAAGGCCATAGCTGTGNGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCG  
TACGGGAGAAGAATAATTTTATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT



CCGGACAACACTCAAAAGTCGTGTCGGGGTCACGACGCCNNTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTNCTTCTACCTGCGCTCCGACTCTTGGANGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTNGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACNCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGNGTGATGAANAACCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTNACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGNATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTNCGAACATCCAATGATG  
CTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAG  
TGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTACAACATCAC  
CATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGG  
GAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAG  
CTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAG  
GTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTTCGGCCTGGTNCTCTTCGCCGAGCTAAAGAAA  
CCGGGAGCGGCAAAATATTGCTTTGTATGTGNCTGCGGGTGATGTGCCCATGGGGCGGCTAGTCGACTCCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGNGGGTCTGTGGAGGAAGACCTCCCATTACAACAA  
CGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCA  
CCTACCCCGGTGCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTGTCC  
AATCACATTCCGCTGGCCNCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCTTCTAGTCACTGAGTACGATA  
TTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGG  
GCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCA  
AGGCTTTTTACTTGACTNCCTATTGTGTCAGTGCAGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTA  
CATCCATNGCGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGCACAGGGAT  
TGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGNAGAG  
CGATAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GGTTTTTGCGAATTTACGGGACGCACCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCTGCTAACCAGATTTTTAGTTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCT  
GAGTNGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATAACGTTCCCGATATTG  
AGCGCTTAACTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCT  
GCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGG  
CCTGCGAACGTGAGTGGGCCGCGCACTGCAACTAATGTCTAANNCTGACGGTTGGGCTTCTCAGAGCCCA  
ATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTG  
GGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCA  
GCACATGACATTCCGCCACAAGCTNNGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGT

GCGAGTAGGTCCCGTTNGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCT  
ATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCC  
GTACTCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAG  
TAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACG  
GACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTC  
AGAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCGCGACGCNNGGTATCAACAGCC  
GACGGGTCTTTTGTAGTCCGCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCCG  
GCAACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTC  
GTTTACGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGG  
CCCGACGACGGATCGGTGTGATGACGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGTAAAGGGGGTTCCACCC  
CGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCT  
CGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGAC  
AGCAGATCGAACTCAGACTCGGACGCAAGCNCAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGG  
ATGAGGTTGCCCGAGACCAACGCCCGACANTAATTTCCATAGGCAAACCCCTCCTTGAATCTGTACCGCTATT  
CTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATC  
AGTAGCTACCGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCC  
TAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACT  
ACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTT  
CGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGNATGCCAGAACCCCTAGTACGTGGGCGC  
AGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAG  
ACAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTGACGCCATAC  
CCCCAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTGTACGATTACAA  
AGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACAGAAAGCACGCGTGCCTT  
CGCCCTGACTATCGACCCGCGTGTACCAAGCAAGCANCCGACAAATCATGTCCAGTATACCCCTCTTTGTT  
CTCTCTGGGTTGTGCGCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTGAAACCCAGGCNACC  
GGGCAATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGGCCGAT  
GTCATATAATAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTAC  
TACCGCTACGTGGCCANTTCCCCTGACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAG  
AGTCCCCGCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACNATGCAAGGC  
GATCGGAGTCCCCTCAGACGGCTCTTCTGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGT  
CCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAAT  
GCAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTACATC  
AATAATCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACG  
CAGGTATCGTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGT  
AGCGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGAAATT  
GAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAA  
CGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGNCT  
GGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAAT  
AAATATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA  
GGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCC  
GAATGAACGACGAGACCCCGTGAATTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAG  
AAGGCGCTTCGATGTGAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTGCATTAATACACCGCCGNTT  
TAAGTCAGCGGACCAAAAGATAGGGACCAAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGAT  
ACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGA

ATCGCGGGTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGNGCNGGCTATCAGTTGAAGTTATAGGT  
CAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATANCGGTGAGGAGCGCT  
GTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGA  
TGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAAC  
ACGGAGAGGGTGGGANGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCA  
GGTTGATGTNAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGN  
GTCCGTAGGTGCGTGACCTACAGCGAGAAANATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCT  
CCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGAC  
AGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGT  
TCACGGTGGTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAA  
GGCGACGCAAAGAAACAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGA  
ATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCG  
TCCAATTAGGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCNGCTGCAAGCGCGTTCGTTACGCCAGTGA  
ATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAACCGGTAGGCGAG  
GAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGC  
AAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACC  
TATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTNCAAACAGCCCTAAGGGCCA  
AGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGA  
GGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAA  
AAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAA  
AAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAG  
GCAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCA  
GAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCTCCTCATGTAATATTAGTGTGTGTGGCGAGAC  
GGCCTTCTTCGGCACCAAGATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGG  
CTGGTAAGAACTTTAGGGGAAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACA  
ATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCC  
GTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAG  
CAGAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCG  
TACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAG  
TTAGCTAAGCTGTGGTGCATGANTGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGC  
TGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATA  
AAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCG  
GTGAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCC  
GTTATAAAATCCAGNCTGAANGAGTGATCAGAGCGCGAACAAATGACTCAGGATTCCGGCAACCGTAATCCC  
GACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGA  
ACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGC  
TTGCGCCTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTACTGATCGAAACGAACGAACTGAACG  
TGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGAT  
AGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGA  
TGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCAT  
AGACACGCAGACAANGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCT  
TCAGGTTCCAATGGCTGCACATGTATAATCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTAC  
CCCGCTCCAAGTGCAGCCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGG  
AGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAAT  
GTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACAT

TCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGA  
AGNTTGTACCATAAGCAGGGAAGTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATC  
ATCTACCNCGCAGGGGGGAAAGTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGAC  
GGTGGAGACTGCTTAATCTGATGTGCNAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGG  
GAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGAC  
TCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTC  
ATAACCCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTT  
AGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGANCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAA  
AGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGG  
CGGTGTGGCGAGTCCAGTAGTCTCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGT  
AAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGAT  
GAGAGCCTNTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGA  
GCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCG  
CTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTGATGTTGTGACGGGGAGGCGACGCTTAGATGTAGTA  
GGCAGCCCTCCATTTGTGAGAACGCTGGGACCNATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGCAAC  
TGGGCATAGNAGCATATGCCCAAGTTAAGGTCTCCGCCGACATGAGACCGGGGAAGTACTGAGATACAAGGATC  
GTATGGACCCCTAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACG  
GAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCNAAGCTGGAATAGGCGACGTACACTGTACGGGGAGA  
TAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGC  
ACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCT  
GAGGAGTAGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTT  
GTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTA  
AACTACAGGTCCCTAATGCTTCTGCTCGCGCNTTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAA  
ACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGA  
TCCGCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGGTTGGAGGATA  
CACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTA  
TACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAA  
GGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGG  
AGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGG  
CCCAATTTTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAG  
AGCCGACACTGGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTAT  
TTTTCATGGAGCCGCTCAATAGCGGGCTTTTCTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAG  
GCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAA  
GGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTAT  
GATACTTACCCGGTCAAAGCGACAGACCTCAGACAACGTCNAACCACGACCCCAGTGGAGTGGTACCCA  
GATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGG  
GACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTA  
GTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTC  
CCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATA  
CCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTGATGCTCCAACT  
GATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATC  
TACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATC  
TTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTT  
AATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACA  
CCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGA

GAGACCAGNAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGT  
GTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTAC  
AGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCTTGTAGGGTACAGAGTCACCAAGG  
TTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAA  
GCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGC  
TATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGC  
GTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTANTTCTGAGGAGGCAG  
CAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACG  
CTGTATCCGAATANGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAA  
CGAAGTAGACGGCTACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCT  
GGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAG  
CTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGG  
GAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTC  
TGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCC  
ATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCC  
ACGCAGCTGCAGGTGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGCGGGCTCGGGGTCCCGACGCA  
TGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTA  
CCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTACAGGCGAAGCATCGTGCTACCA  
GCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P25, London\_12, VIM-2, 08.10

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTGATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTCGTCGCGTGCAGACTGCNTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCTA

CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GNTCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCTGCTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCCGGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCATATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTTCCGGGGCTGTC  
CCTAATAGATGTAATGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTCCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTNAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCNCTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTATT

ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA  
TCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGT  
GTACTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAGCGCT  
CGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCCTCCCCCAATATCTTCTCCATTGACC  
CTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTC  
GAAATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGCTGGGGTCCCTCCCTTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCC  
ACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTGGTTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCC  
TTATTGTGACGGGAGATCCAAATATGCGGGTACCTTACGCCGTTTTCTGTTCTGTTCCCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCATT  
AACCGCTGGGTAAGGCGCAACTTTCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGC  
GCCCCGCTGGGCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGC  
CTCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCCA  
CCTTAAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCC  
GCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACTGGACTTGAGTCAC  
GACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCTCCGT  
ACGGGAGAAGAATAATTTTATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCT  
CGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCC  
GGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGTTTTTCTGATGACTCGTTTGACTG  
TAGGCCCTCCTTACTCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCTANATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCGTGAGGCTTCTTTCCNNCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTC  
CAGGGTATTTGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTTAGTAGCTTCATATCGTCTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGCGTGTATTGTTACTCCT  
GAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTAT  
TGNCGTTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT  
ATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTT  
CAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGG  
ACGTGCCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCAT  
GAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTT  
CCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTC

AAGCTGTNNGGTTAGTTGGCTAAGAATTGGATGGAGGTTGCGCCTGGTGCTCTTCGCCGAGCTAAAGAAACCG  
GGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCATGGGGCGGCTAGTCGACTCCTAGA  
ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGG  
TCCCGGAAACCTTGTTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTCACCT  
CACCCCGTTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAAT  
CACATTCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTNCGTGTACGTGCCCCCT  
CGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAA  
AAGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTG  
GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCNCAACCTTCTCCCGCTTTTTGGGCTC  
TAGATTTGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTCAAGGC  
TTTTACTTGGACTCCCTATTGTGTACTGCGGGCCTTCTTATGGCTCCGGTCTGAGCGCGTGTCTACATCC  
ATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCAC  
GGCAGCGCGAGGTGATGTCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATA  
GAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGCTACTGGTGAACGCT  
TCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGTTTT  
TGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGNTTGACCCATGATGGGGAAAGCACGGCCTAGCCTG  
ACGGATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGGCCGTGAGCACTTCTCTCCTGAGTA  
GAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGC  
TTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAA  
GAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTTAGCGTGTCTGGCTAGTAAAGTGGCCNGC  
GAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGCTTCTCAGAGCCCAATGCAC  
AGTGAGCCGTGTGTAGAGGGGAAGCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGT  
ACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACAT  
GACATTCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGACTCGGGTTGGGNATCTTTCCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTC  
GTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCCAAGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTTCGGCAAC  
CGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACNGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTNGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTTATTACCAACGACGCAGACCAA



AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCCA  
AAGAGTTC AATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCCAGAAAACGCGCGTGCCTTCGCCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAAACGAGACCGGGCCCTACAGTTGTCTGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGNAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTCAACATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGAATCGGATCGAATGAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACATCATACTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAANCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAAGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGGCAACAAGTGGAGCAAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC

GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGGC  
TCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGTTGTGGGGATCGGCCGAAGTACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAAGTACTCTTCAGGTTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAACCGCAAGAAAACAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAAGAAATGGAATACATTCCGCGGG  
GGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTGATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGTTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCCGGAGTGCTTTGAAGGTGAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTGTCAACTGGGCATAGG  
AGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG

GAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTC  
GCAAGAAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACCCGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGCGGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>E12, London\_17, VIM, 04.14

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTNCGCCCGTTGCAAGGAGANGGGCANNNTCAGAACTCTTAAATG  
AGAACACCGACATCATATGCTTCTGGNANNATTGTCGTNACTAGCTCTCCCTACTTGCTGAAGTNGGCGTNG  
GANCGCATAGTAGACGTTTNTTTTNGGCCTGTATCGCATGGCTTTACTTGACTCACACNAGTGACTCATA  
TAAGACATTNAACAACTGNATGGCATGCACTTCTGGCCTCGTCNGTCCTCTACCGAGACGCTGCAAAACCGG  
TCTCTCTCCGGGACTGACTCNGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTNTGTAATGT  
CTTNGACTGTAGCTGGCTCTNCCCGACTATCTATTCGTCTGCGCTNNNCGNCCCCAGTTTTCGCGCCTTACC  
GAGCTTATCTTAGTNTTAACCACAGGCATGCGTCTGTGTAGTTCTNNNNNTAACTCTCCAACNGGCCCTTGAG  
TGAACAGAGNGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTGNGGAGGGTCTTTCTCGTCTATTGGGCGCNT  
GTCCACCGCCNCNANTCGGTCGCCGNTGGNAAGCTATATAGTTGTCTTCCGCACCACTGGGCGCNC CGC  
NGCATGATCAGACGCTGCTCCAAANCTCCAGTTNGCGGGAGTCCCTAANCATCTCAGCGTCGTGCACGCGC  
CGGAGCNNGGTCAGATGGGTCNAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATNTTGGCAC  
GCANGTCTGNAGCCCAATCCTCTAAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCANNNTTGTGTGAG  
TGAAGGAATGTGCGCCTACTAGAAGTCAGCATCCGAGNTCCACTGNAGTCCGATCCTCTCGGTTTCTCTCGA  
ANGGTCTTCTANGTAAGTCGTTAGGGCGGCANAGGAGNACCCTATCGTCGTCGCGTGCAGACTGCNTTGTAG  
TCGCGCACTGCCTCAGTTTTGCCACCTGCGGNCNTTGTAGAGAGCACACAAAATTAGTCGTCCTTATGANAGAN  
CGANTNGTATGCCCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCTGTTAT  
ATGGTTCGGGTTCTGGCTGCTCTGGCGTNGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACNAAG  
AATGGAACGGACACATGCATTACTTGTACAATAACGCTCTGCGGTAACAAGGGGANTCCACTTTCCCTATTGC  
CGTATTGGTGCATTGGAGAATGACNNCCTACACTNCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTT  
AGCCAAACAAATGTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGNACGGGCGATTCTTGACCTC  
AATATCAACCTGCTCGTATGGACATTTNTAGCAGNTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTC  
CCAGGTCCAATCCGCTCGTANGTTTTCTTTACGCAGCCTAGTCGTGCGNGAGATACCCCATCGGGGGTTGA  
TCATAATTGCGTGGGCGGACTCGCCCTTANAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAA  
TTCTTTCCGCTTGTCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGNATGGTTCGAGTCCGACCC  
CATCATCTCAANTTGTNTNACCACNTACTCAACTTTTAGTTTTAGTAAGGCACCGACAGNTTANAGCCCCNCG  
CTGCTGTCTGGATCTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGAC  
ACATCACCAATAGCCCCAGTTGGTGGCGAGTCGACATCGTCAGTCCTNTATTACGTACAGGGTCNACGCATA  
GTCGTTNGATACCCAGCCGATCTNGATCNCNTNACATTAAACNGCCTATGCNTTTTTCCATTTGCACATGAG  
CACANCCATCAGGTTAACCTAACTTTGGACCCGCCNGCTAACATGAACGCGTTTNCNTAGACGTTTGTAAA  
CTTCCCCTGCTGCGAGCTAGGATCTCGCCTCGACGATTGAACCTCCGATGCNNNAATCCGGCCCCNTCCACA  
TATAGGCGTGCCACAGGACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTT  
CTCCATGCCCTGCGGTTGNTCGTCACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAG  
GCGCGCCTAAGGCTCGACCAGCCGCTTGNCCCTGCNCACAAGCANNNGNACCCGCGGACGACTGTCTGCCT  
GTTTTACCCTCCTCCNCTATCCTCGATACGCAATGTAGGTGCAACATCCGTATTTGTGAAGTTATGCGCCTG  
NGTCCCCCTTATACATCGNCACGAGAGGCCGGTTGATTAGTATCNAAGCTCTCTACGGTAATTTTTTGTGCCG  
GACTGGTGCAGTTNNCCTTTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTNCNGTGAGGCGGGTCGG  
TGCGAGTTCCCGTCCGNGACTCACGAACANNNTTCGGCCCCCTTTCTCGCTCTAGGCCCTAATNNCAAG  
CCCCGATTCTGGGTCGGTTTGTAGTGTATCACGCCTGCCATGGACTAACTTCGTAACCTCATCCGACCNTTC  
CGGGGACACNTCATGTTCTGCCATATGATCTCCCGCATNTTAACTCCTNNGCTCGCTAAACTGTGGCA  
CAGTCNGTGAGNTAGTATCCCGGTGNCGATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGNG  
GGGCGGNCGNATCANNNGGTCGGAGGAGTGGCCTNGTACTAGGGCGCCCACTNCCGACTCTGGGACGNC  
TCATCAATGCGGNCTGACTCCNCGCTCCTNCTCGCAGGTAATCNCTTTCGGTAGTAATGGAGTGTCCGGTGCC

CATTATTAGCACGCTTACTTACGGAGGNACCCGTGCTGAGCGCTAGGCACGGTCGTGGNCATCGCAACCTGC  
AAATATGCCTTTTCNGTAGCCNNCAGCTCCNTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTT  
AGACCACGGCCGAGCGCGTCCAAAGAGTNAGCNTACCGCANGTTGNNCTTGNTATTGGGGGCGGTNNNTCT  
ACTNCGCCNTACGATTGCTAAGATATNCATTACGCGCNGTNNNNNCTACAGGATACGGGTCTTCCAGGTG  
TGTGGGTACATTATTGAGTGTAATGCTGACCACGANCTACCGCACAGGGGACTATTAGTGAATTTCCGA  
CCGGTGGCNTCTATCNCCTTGCCTTACTTTTGTCTACCTCGATATAATAANATAGGGCCGGTAGTCAATTCTT  
CCNTACNGCCAAATCGTCATTTAGCTTTGCTAACTTATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTT  
CTCTTGAGCCCTANCTTTCCGCATACCAAACAGATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAAT  
CCAACATCAAGTACTATTNCTCCTGNTTCGCATCNTGTTTCGGTTCCTCTTGTAACAACCAGATACGCTATTTGT  
CGGCAACNCCATCTATAACGCACGTAATCGGGATGGGTCTTGCCTTCGTCCCGATAGCGTAAATNCTTGA  
GGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTTACTCGCTTTATCCTCGCCAGGCAGTTCAGCTAA  
ATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTGGTTGGGTCTCCTTCCATATCATNTATCTGGCGTCTCAC  
GGTCTCGANGCAAGGNCCACTGCATCCACTATCGCTTTTACGAGNGTAANCATTGNTACACTATTGGGTTGN  
NGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTCCCTAATAGATGTAAGTGCATCAGAGTGCTTNT  
GNTGGTGTCCAATCTCANNCACTATGTCGTGAGATGTTAGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCA  
CGGGTCTTTAACCTGCGTATCCTCCAAGCGTTTCGGTGGGGCGNTGNGTTAGANCGAACGCTCCCCACTAA  
ACCCTCGAACACAAGCTAGTCTNTCCATTCTAGGCGCGCGATTTACCCTTGAGCTTNAANAGCTAATCCCGG  
GGACTCCAACNNCATGAACTTGNTTTAGATGCGGGGTGCGACAATACCGAAGCCTTGAGCTANACNGGCNAT  
AAGATTAACGATCNTCCATCACGATTGGTCACTCGCATCGTTCCGGTCTAAACACTATGNTGGTTTTTACNCCCT  
AATGNTCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTGCCCCCNCTCGTTGCGTTTATTCTTGGGTTT  
TGCGCTTCTCGNGCCCTTCTCGCGACAACACACTCNGGCGCTCATTGCGGCGTGGCCCTATGGGTTCCGA  
CGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACNCAACGCCCTNGCCTGCCCTTTGTAGCCGTCACTT  
AATCNTGAGGGCNGAGCAGCTGTGCGNCAGAGTTNGTACTGGTGAAGTCGTTTCGATCATCACTTTGANAATA  
GCATTGCTCAATTCACCAATCCGCGATTACTATTGAGTGTATCCTTAATCGNCACGCCGATGGTNTGTAAAA  
CTATCGGGACCACCCGCCGATCTTATNGATAACCCGCANTGACATCAGTGCTTCCCTGTACGNCGAGTTNCN  
GCACAAAGCTTGAGATCGCCGTCGGNTTGTCCCTACGGNAACGCGGCAATACGAGCGACCAATTAAGCC  
NTGACCAGAGNGGCTCCTTCCGTAGTCTCACNACGATACCANATTATTATGCCNNNGCGCCTCGAGAGATAG  
CGTGCAGTCCACGCNAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGATTCTNACCCAGNNGACGGGA  
CGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATNGCTAGTATCTGGGGTGAGCAGCGGCCCTCG  
TCCCCGTTTTTCTGTTTNCANNGNGCCCACTGACGTTTTACGACGGTTGNGTACTCGTGGATNCCTATCGCT  
TTTTTCTTCATNAGTAAACANAGGATTGNNAANGGAGNNGTGCGAGCGNTCGGCCGANAGNGCCACCC  
TCGCGNACCNGNTTGTGCNNCGCCTTCCCCCAATATCTTCTTCCATTGNNCCNNGATTAANAANNCTCAG  
TNNTAGTGGTCCGATTCCCGNCCCTCACTCATGTACGNGCTNNTTGTCTCAGCGATGCTATTCTACGTTGCTC  
CCGGGTGANCGNGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAAATCCCCATTAATACA  
NGNAACNNNTAGCTTACTGAGTTTNNCCGGCGGCNCACGACGCTTACCCCCCGCGTCCGCCACTTGAAG  
GTGGCNCATNCTCTACAGAGGCTCTNGTCTGGGGTCCCTNCCTTNACTATGAGTAAANGTACNATTAATCAG  
TGACGCCATTGGAGGTACGGATTTGCGNGCACGGATCTTAGCTGTGCCCTTCTTTCCACATCCCCAGATTAC  
CCAAATTCNCGCGCAGCTTCCCTAGTNNCCGGCGGACAGAGNATGTCNGTTTCTTACNCCCCTAGTGGGCGT  
ATCGCGNCCANTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGATTTAACGTAANA  
AGGATGCCAGACATAAACTAANTGTCATCGTAAACGTGCTGACAAANANTACCATTGCCCTTATTGTGACGGG  
GAGATCCNNATATGCGGGNNCCTTACGCCGCTTCTGTTGTCGCCAGACTAGGTTNNGAANNATCCAGTA  
CCTCTTCCNTAACTCGCTGGTGTNNGCTTCCCTGCCAACTATTGTAATGGCNNNCACATTAACCGCTGGGTA  
AGGCGCAACTTGNNGAAGTGTGTTGCGGNCGCTCGACACCGGCCGGGGACTTTATACGCGCCCCGNNNGG  
GCCNGTCCCCGAGAGCGGATAGCTCNNNTAACCTGCAGCCACNNGGCGGTCACTACGCCNCCCTTTCA  
GACCTCTCGTAAATNCTGGGGANTCTCCTTTGACCCGAGGGGTNCCGACGTACCTTACCCNNNTAAGGCC

ATAGCNGTGCGCCTTAAATNNGGTATTTGTCCNNCCCCGAANTCTCGCTNCGGGGATTCCCCGCACCGCC  
ACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCNCTGGACTTGAGTCACGACCTCNN  
NCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGANNNACACAGGGGAAGTCCNCCTCCGTACNNGGAG  
AANAACANTTTTCATGTTTCGCGGTACNCTACGTGCATCANGCTCGCCGGCTCTGNCCAGCACACGTTGGCTA  
ACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGANTCTCCCGGTCATNATGTCTCTCGACNC  
CCGGCTTCTAGANGANAGGTTATTCTAAGAANNAGCGGTGGCCCTCCATCACNGCCACCCATCGAGTGTGAG  
CNGGNGCGTNNTTCTGTATCNTGCNNGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACACTCAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGANTCTCGCGTTGTAGNCGGGNAACAATT  
TGACCCATCGCTGGGACCANTTATTACTACAGTGNTCCAAAACCGTTTTNNGATGACTCGTTTGNCTGTAG  
GCCTCCTTCTACCTGCGCTCCGNTNTTGGANGAGTCTCCTANNCTACANCGTTNNNAGATANACGAGTCAA  
NTCCGNGCGAGCCAGCATCCTAAATGCTGCANTTATCCGCGCCATGTTCTGGGCCATCCAGCNGGGATTAGT  
CNTGCCCGNNAGGCTTNTTTNNGCCAGTGTGGCCAGGGTGTGTTTGTCTGACNTCNNTNCAGATCATTCA  
GCCGATACATTGAGTGGGNNNCNCAACGCGCCAGNGGACCTTCNCNTATTTGGTGATACAGTCCGCNNNT  
ANNCCNNGGTATTTGNACCATCANGTNGCCGTCAAAAGAAATACCATAANCACCCCCAAGCGCNTGTGTG  
TAGTNGGCGCTCTGTTTGTAGNTTANATCGTCGTNAGCGGGCACTANNAATGGTNCCAGTCCCCGCAT  
CTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCNATGCCAAANAGTNCTAAAGCTTCT  
AATTNTCTTTTCGCTGGAAGNCCANNCCNGTCCATCGGCGGTGGCTNGNANGCCCCAGCGGCGTGTATT  
TGTANTNCTGAGCAGCTGTAGAAGGTGTCNGTGTGATGAAGAACCCGTCCNTGGATTGGGCGGCGTAGT  
GGCTTACTATTGNCGTTGGTACGACGACGGCAGGTCTGGNCCCGCCATCGCTGGANCCGCCCGCTGATG  
GTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAA  
TCCGTTCCGCTCTNCTCCTAGTCTGCGTCTNNNGATNCTTATNCACAGTNAAACGGCNGACNCAAGGTA  
GCATATCGAATANCCCTGCCTTAGCNCAATTCGTAGCATCATGACTTCTACCCTATTNACTGTTCCGAANATC  
CNATGATGCTTTCAGNTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTNTCGCNCGATGA  
CACTCGCNNTGNACGTGCCCTTGCGCANGCCAGCGTACAAATCAACCGGCGTTATTCCGTGNTACCTTACTC  
ACAACATCACCATGAGGATCTGNTANTCGGGCNGTCTGTTAGGCTGTTGGNNNNGCGTGATATCTGTTAG  
CAATANNTGGGGAGNATCTTTGGTACTTTACGTATNCCTGCNGTTAGAAATTTTACNGCGGTTTCATAGGATTG  
ACCGCTATTAAGCTTCCTTCATACCACCTCCTACCCTCATNTTGATCTCCCCAGATGATTTCCCGCTGATTGTA  
GCTCGTGAACAGGTCAAGCTGTGGGGNAGTTGGCTAAGAATTGGATGNAGGTTCCGGCCTGGTGTCTTCGCC  
GANCTAANGAAACCGGGAGCGGCAAAATATTGCTTTGTATGTNACTGCGGGTGTGTNGNCCATGGGGCGG  
CTAGTCGACTCCTAGAATAACACGGCCGACGTTTTGNTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCT  
CCCATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGNAGCATGCGGGCTGGACCGGCCTACCAAG  
CGTTGGCACGTCACCTCACCCCGTCCGGCGTCTACNGCGATCGTCTACTGCNNNNTGCCGGTACCGGCGGGG  
AACTCTGCCGAGTTGCTAAACTGNCCTCCGGTGAAGNNTTTGGTGCTAACTCTGTGTACCNGGGGGTT  
NTTTACCATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGNT  
TACGTGNANGTGNCCCCCTGCCCATGTNCGANNTNGCTCCACCCGNGTGGGCCATCTTCTATATCCANCCTA  
GACNCGAACACNNNCAAAGAANGAACCACCGCAAGTNNCGTGACGGTCCGGTGTNCTCAGTCACCTTCTA  
GTCACTGAGTACGATATTTGGATAGTTCATAGGCANGTATANNCTACGCACCCGAGTTANCAACTCCTCAANC  
TTCTCCNCGCTTTTNGGGCTCTAGATTTGGGGGCNCNNCTTCTGCNCGCGTATAGGCCAGGAAGTTTGCAG  
CANNCGATAATCTTTCAAGGCTTTTACTNGNACNCCANTGNGNCACTGCGGGCCCTTCTTATGGCTCNG  
GTCCTGAGCGCGTGTNTACATCCATGGNGGTCNCTATACCTTAGTCGGATCCTGTTCTGGCNTATANNGAA  
AGCTGGGGGCACCAGGATTNCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGT  
GGGACATGGGANCGAAGNGCGATAGAACTGAGCGCGAATTNCAATACGTNCTCACGTGTACTAACCNATN  
AGTCAGGCTTTGTCANTGGTGAACGCTTCGGGTGCCGNNAGGAGTGTANCNAGNTCGCANCAGGCNTGTNN  
CTACGTTGCGCTGGCCGCNNNNNGTTTTNGCGCAATTCTACGGGACGCANCGGCGTTGTGNCCGTTNGACC  
CCATGATGGGGAAAGCACGGCCTAGCCTGACGNNTNCAGTCGNNAANC GGATTTTTAGTTCGCAAGTGNA

AAGTGCCCCNTGNNGACTTCTCTCCTGAGTAGAGCCCATCAGTCCGATCNCGTGCCGATCTGAATCTTGGCTA  
GACNCGCCCATANGTTCCCGATATTGAGCGCTTTAATCTANNNCCACCTTNNCCGTGNNTNCTGTCCATNTGC  
CACCAAACGCANCCANGGTNCTNCGNTGCGAAGAGTTGATTTANGTCTGNCGTTCTATTCTTATCCNATTTG  
CGTTTCAGCGTGCTGGCTANTAAAGTGGCCTGCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTNCTAA  
TCCTGACGTTGGNNTTCTCANAGCCCAATNCACAGTGAAGCGTGTGNANAGGGGAAGNCCNGGGAGGGA  
CGCGNNNNCANNNNNTCCATTTGGCATTGGGTGGTACNNAACCGCACTNGGCAAGCNCAGCTCTCTTGTTA  
CGGCTGGGAANGTTGCAAGAGACAGTTCCAGCACATGACATTCCGCCACAAGCTCTGCCACNCGCNGGTAA  
AGTAGGGGGACAGCCGAGNNAGNCCAGNGCGAGTAGGTCCCGGTNNGNATATGTTAACTTTGGAGNATG  
CTTTATTCGNACTCGNGTTGGNNNCTNTCCTATACTNANTCTGAATCTTCNCTAAGCGAGNATNACANCGCT  
AGTGATAATNACCTCCACGTNNNGCCTCGCTCNGTNTCGTAATATGAACAGCCGGCGNGCGCCGTANAGN  
NANNCAAANATNTNTAGGGTATTNGCNGAGCANGTAACGACANNACGAATACCGGCNAGGCTANTCGTCT  
GTCTACTATCCTGACTCAACTCAGCCNAGACGACGNCAGNNTCCCGGGCGGGAGATGGCGTGCAATCCT  
CGTANCGAGAANNCGNAAGAATCACCGTATGGGGTCNNAACGCCGATANTGGNGCNNNCTGAAGNCCCAA  
NNTGCTTTGATANNTCCCGGACGNNNNTATCAACAGCCGACGGGTCTTTTNGTCCGCCNCNACNCCGTG  
GNNNNGATNCGAATTTGTCTCTCTGGTCTAAAAGGTGCGCANCCGACGACTGACGCCGGGGGGGATANT  
ACCATTGNGGACCGGACATAGCCNNTCAATGGGCTCTCTCGTTCAGGGCTCCGTACAGTTGGCGNNNNCATC  
TGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCANNNGCNGCAGCGGATCGNGTTCAGANCGACGT  
TTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTNCACCGNGACAACGAGGNGACTGTGTTCGACGTAGA  
TCAGGCNNNNGTTNTAGTGCTAGGTCCNCGCCCAAGGCTCTCGGCGCAGNGNTACATGTCACCATAGGCA  
ACCCGNTTGTGTGGACGTATNAGCAGAAAGGGCGACGGGGACAGNAGANCGANNTCANACTCGGACGCAA  
GCNCAAGGTGTAGGGNTTACATNNGCNCNNGGGGCAAGTCGGATGAGGTTNCCCGAGACCAANNNCCGA  
CAGTAATTTCCATNGGNAACNCTCCTCTTGAATCTGTANCCTATTCTGGATAGGAAGNAAGTACGAACNG  
ACNGCCCCGTGTCAAAGACAGCGACANACAGGNNNNGGNTGATCAGTAGCTANNNGGTACGCCTCTCAG  
ACTATGGGGGGGTAGGGGNCCTATTAGATGAGGCCCTCANGTCTCNCTAGTCNNGCCGACTGAAAGCGGG  
TGTNGAACGNNTNNGCCGCTAGAGGATCTACGGCGTNGTCTNNNNACTACCCNAACNTAGCATGGTAAGCA  
CTCAAATNCAATTNCNNTTCGAACGGCGNNTAAGTAGGGGGGCTNNNNCNNGTACGGTGTATGTGTACTGG  
GCCNCTTNNCTGGNCNNCTAGNAATGCCAGAACCCCTAGTACGTGGGCGNNGCCTCCNGCGTTGCTATTTG  
TNNGCCGCATAGGAGGGGTNCGNAGTCGGGCCCCGATTNCCAACGACGCAGNCCAAAAGAGGGGCTCGGGT  
AGAGCGCTGAACTTTGGGTGAGANNATCNTCGTAACCCCTGTCAGNGCCANACCCCAANGAGTTCAATGAC  
CCATGTAGACAAGTGGCGAAGACTCTGAAAACGGNGTCGTGTACGATTACAAAGAGCCCTACCCACNTCGG  
GCGGAAGCAGACTTGAACCAACTTACNNGGAACAGAAAGCACGCGTGCCTTCGCCCTNNNTATCGACCCN  
NGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTTNGTTCCTCTCTGGGTTGTGCGCTN  
GGTCGTAGGACGATGTNACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGNCAATACAGGGGACAA  
ACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTNATATAATAAAACGAG  
ACCGGGCCCTACAGTTGTGCTGAAATGGACTTANACTCGANACGCTGCGAGTACTACCGCTACNTGGCCCAT  
TTCNNACTGGCACAGNAAGCGCCTNNNNGTAGTGGCACNAACGTTCTACGAAAGAGTCCCCGTCTANGGCC  
TTNAAGTNGACNGGTCAAAGTCCGGCNNTTGGCTACTAGNGGACCATGCAAGGCGATCGGAGTCNCTNC  
AGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAAC  
CCGCTATCGGGGACTAGAGAGAAATATATGNCTACGGTTNCATGCCTGGNTACGAATGCAGTGCAGAAAAAA  
AGTAGCCGGGCCNGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACAGCT  
GGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCTA  
TCGCACATGGCCGACTTACCATTNTGTCACAAGNNGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCNGG  
AATCGGATCGAATGAAAAAGCTGNGCATCCGNAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGANA  
GCCATCCACTGCCGTGGCAAGTNTACGTCNTACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAAT  
NGGTGTAGGAGCGACAAGCCNANTGNNGCTTCGGACATTGATGTGGCTGTTACAGCCNNGCCGTANANACN

TAANTTCAGATCGTGACCAAGAGCNCGGTACGTCCCCNGATGNCGNACCCAATCCAATAAATATTTAANG  
CCNNGNACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTNGAGCGTACCCCAAGNNAAGGANCCGTAA  
ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGNCAAGGGGANAAGCGAGCGTC  
TCCGCCGATCAATTGCCTTCNNGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACG  
ACGANACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTNCGACCANAAGGNGCTT  
CGATGTGCAGANGAGATCATCCCTGTANTANTGAAGTAATTGGTCGATTAATACACCNCCGCTTTAAGNCAG  
CGGACCAAAAAGATAGGGANCAAAGTAGGTTTGTACAGNTAATAATGACAACNCCNNGNGCTGGATACGAAGT  
AACGCCNCTCGAAAATAGTGNNGTACGCGGGGAGNTGTNTCAAGTCCGNGGGGGCGTCTTAGGAATCNCG  
NGTNATNCCCTGTGAAGGGAGATGAGGAAGNAACAGCGAGCNGGCTATCAGTTGAAGTTATAGGTCAGGCT  
CGGGCCGTNNNGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATANCNGTGAGGAGCGCTGTAGAG  
GAAGACTAATCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGA  
GTGCGACGGAGANGGACTTCTGCTCCGGTCCAGNGCAATGAATNCNAGGCNAGNGGGGTAAAAACACGNA  
GANGGTNGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGNAGCGGCTCNAGCGGTCNTGAATCAGGTTG  
ATGTNAAAGTACCCGNAGACCAACCGNNGGTCGGTGTNGNANATTAACACAGTGCCGCCAGGNGTCCG  
TAGGTGCGTGACCTACAGCGNGAANATNGGAGGAATTTCCGGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGCGAAGAGGGGTAGCGGNCCAAAGAGAGTGTCCGATGCTCAAGNGACTCCGACTGACANC  
GCANTAGCAANTANNNNCGATAGGNGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
ACGGTGGNGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTNTGGNCTGACCAAGAAG  
GCGNCGCAAAGAAACCAGACCCCCAGTGAAGTGGTCCGTTTGGGGTCCATTAATGAAATACGGACGAA  
NNNGATGCCGTTCTTACAGCANGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCG  
TCCAATTAGGTCTTACACCCTGCCCGAACCGNANCCGNGGAGGCCGCTGCANGCGCGTNGTTTCCAGCCAGTG  
AATNCTNCAGACGGATTGCGCACGCTTGTATCATGCCGTNGGCCNACAAGTGGAGCAAACGNTAGNCG  
AGGAACAAAGTTAGCTATCCATGATATTGGTGNNTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGNA  
GGCAAACATCGGATGGGAGGATACGGGGGCCCTTGGAAATCGAAAGAAGGGANTGGGGAGTATAGTAAGAA  
ANCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACNNTGCAAGGGACCTGAG  
CGANGGCCAATACCCAGNTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATT  
TTAAAAGCCATTATTTGGTANTCGNGACAGAGGAACTNNTGGACCGANAGTGTGGCNAAGGCAACAACA  
GGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCA  
GCAGGCAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGNAATGGAG  
CCCAGNACATGGCTATTATGAGGGATCCGCTCTCATTGGGACCCCTCATGTAATATTNGTGTGNGTGGCG  
AGNCGGCCTTCTCGGCATCAGAATTTTGTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTA  
GGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGG  
GACAATNCATGCGCGCTCGNGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACANACGAGGGTACAACG  
NCGCCGTATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCA  
CGTAGCNGAGCAAGAAGTTGCTTNTNACGACTTGACCCGATGAGGAGAGTTNAATTGACCANTATGATGCCA  
CAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCNGGACAGA  
AGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGNAAAAATCTTCTAAGATTGTCGCGACGCATTTAG  
ATTTGCTNCCAAGAGTATGAGGGTGNNACGGCAANGGTTAGGGTCTGTTAAAGTGTTCNACGCCGAACCTGA  
CGAATAAAACGGNAGCCTGNNAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGNNAGGCA  
TTACCCNGTGAGGACTTTAATAGGCGGAGGTCCTGCCNCTCACTTNACGCAGGATACGATTGGAGGGCGGAA  
ATCTCCCGTTATAAAATCCANNCTGAANGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCG  
TAATCCCGACAGCGGCGNCAGTTGGGGAACAGCGTGCCTACNCTGTATTCTGCCCNACGCTTGTGGGGAT  
CNGCCNAACTGACTANNNTGCGAGGGGNAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGC  
ACCAGGGCTTGCGCCTAGCATTGATTTTCNNTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGA



AACTGAACGTGGACAAGAGAGATNTGNNGACGAGACGAGAAGCGCNTCGNGTTGCAAANTCGGCGAAAGG  
NGGTCATGATAGTATATGGGGCGGGGTNAGGGAAAATGTAGNANGCTTCTCTGGGCTAGTTGCCCTTAGGC  
CGTGACTGTGATGAAATTGACGAAGCTCATTNGGACAAATATNAGGNGAGGGCACCTGTCAGGTTCTGTTGAA  
CGTGGTACCATAGACACGCAGACAAAGACACCCCATTTGTCGCTANAGAGGTGTCCTCATTGTATGGTGCATAC  
GCAGTGACTCTTCAGGTTCCAATNNCTGNNCATGTATANNTCGANAGAACGTAGTTCAGGGAAAACCGCNAG  
AAAACCAGCTACCCCGNTCCANGTGGGACCANNTTGGTNCNGAGGTATCAAATGCTTCNACGGACGATTCA  
GAAGTTTNGGAGGAGCTCTTGGCATTTCNNNCTATNTTATGCCATANGAANGATCTGGCCTGCATACGGATG  
GTGTCTAACAGCAATGTCCTAAGGCCAGTNGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGNG  
AGNAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGNCATAGTTNAGGCAGANGCAAGGA  
CCACGGGGGCATGGAAGATTGTCACCATAAGCAGGGAACNTGTGGTGTAGGTAGCGAGGGCCCAAAGGAG  
GGACCCGGAGTTATCATCTACCCCGCAGGGNNGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAG  
AGCNTCTCAGAAGNCGGTGNAGACTGCTTAATCTGATGTGCNAACAGACCCGTNANNNTGNCGAGGGTTGC  
ACGAAGGAAGACTGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGNNTNGCCTAAGAACG  
AGNCCAGGATGGGACTCAACGCNAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCC  
CATGAGTAGCTCCGTCATAACCCTTCGAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGNAT  
GGGACCTAAACTNAGTTAGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGANCAGCAGATGACGNGTGGGT  
AGCCCCTGCGCGTGAAAAGGTCATANCTATTTAGAATCCCTAGCCACAGATCTCGNCTTGCCGACTCATCTGG  
CACCTCTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGNAGGAACGGGCAATGGC  
CGAGGCACGTTGGGAGTAAGAATGTCACACGGAGNCGCGGAGTGCTTTTGAANGTCANAACAAAAGGATAT  
GTATGCCACTCCCCGGATGAGNNCCTCTGGCGACCCCCGGAGGAAACTATGTACGATAACAGCACCCGAAC  
NCCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGGAAGAATNNCACGT  
AGATGTAGGNACNANCCGCTGGTCCACAGGANACGTTGACGCCCCGAGCGGTGCTAGTTGNGACGGGGAG  
GCGACGCTTAGATGTAGTAGGCAGCCCTCCNATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAA  
CAAGTNNCNCGCNTTGCAACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGANNCGG  
GGAAGTGANNNACAAGGATCGTATGNNCCTCAAGCCCAGTCTAATCGAAGGAATTAANATNCTATCACACA  
GTGCGTGCTTNACCGGTGACGGAAGTTAAANNCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGC  
GACGTANACTGTACGGNGAGATAAAGTAGGGCCGTCTNGCCCTACTCANNGCCCAACAGTTCCTCCCGTAC  
GAGGCTAATCGCACCCCTGCGCACCCGNAGNAAATTTCTCGGGCGGTTACCTANGGCTGACACTCGCGTAA  
CAAGATATTGCCAGCGGATCGCTGAGGANNNGGGAATNAGTTTGCCGNATTCTGGCGCAAAAATCTGGCGC  
CGCGGTAGAGGCAANNACCCCTNTGTGTTAATGTGACGANGTGAAGCGCAANGTGTGATTGGGTTGCGAT  
CAAAAAAGGTGATGGTACCTGGTTAAACTACNGGTCCCTNATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGT  
NNGNTAANAACCCAGGCAAAGAGAAAACNACGTAACGATCTNGTNGGAGCTCTTGCTATACTNNCAAATGAC  
TCACCTTTGAAAGTANGCGCGGAGGGATCCGCCCGCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCAT  
CCACCCAGATTCTAAGTGTGNAGGNNACACAGGTCCGAAGGACGAACAGCTGACAGTGCAANCANNNTTG  
GCCCCCAANNACCAATCTAGCTGGACTATACCATTGATCGCAATNCAAGCAATGTTNCAGTTTCCGATAAA  
GCCCCAACGATGATGGCTNGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCCTTNTGGTAAACTGTA  
CCANGATCCNTCTCCCCCTCGTAATGNGGAGTGTGGGTGGANACAGTAGGNAATCAACGCGCTTCAGATAA  
CGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGCGAGCGGCTG  
GGAAGTGGATTGCGCCGNGTGGAGATAAGAGCCGACACTGGGTNTAGCGGGTGTGCGNGAGAGTGAATGG  
GGCTGGCCATTTAAGAACTGATTACAGCNATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTG  
AGCTGGATTATGGCTACACCGGAGACTCCAGGCNGCATATTCTNAAGCCTATACGGATAGATNCTNAGCTGG  
TAGAGCGGAGACCGACTACATCATAAATCCNAGGCAATCTACTTCTATTAGGGTGGNNATCGCTGCTAGGC  
ACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAAC  
GTCNAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCAGNTCGAACATCGAGAGGAGGACGG  
CANANGATNGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGANATGCTGTGTGAGGNNCGC

ATNGTCGTAGAACCCCTGNNNGTTTTGCGGTACTIONTTGGTCTAAGCACNCCGTCTGGGGTGCGCCAGAACC  
NTGAGTNNNGTGCCAGCAGAGTAGCTGCACATCTCCCTCNGGCATCGAGAAGGGCGGTTGGCGGCGTGACT  
ACTNTAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCAGNAAGGAACCCCTCTCTCGAATTGGATTAGGG  
CGCCCCNAGCGGGNNANTACGTTNNTGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGC  
GATCGATATGCAGGGGTGGGACGGAACGANNAATCTACTCCGACGGGGGATCCCCTCAAATCCGCACGC  
AGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCG  
NNGGCTACTCAGAGGTCAGTTCATCTCCTNCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTCA  
TGGTAGGACGANATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGCAGGGCC  
GGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCNNGTCGTCGATTGCGGACTCGTTT  
AGNAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGCANAATACTCTCATGTAAAGAAGAGGTCTT  
TGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGNTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTG  
TNATCTACCTAGTGCCTTGTAGGGTACAGAGTNACCAAGGTTCCGGATCAGGCAACCAGGTCAAAGACGTCT  
ACGGGCGCCCATGGGTAAGCGGTANNCCGTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGT  
NGTTGATGTNTNTGGGACTCCTTGTGCACGANTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAG  
ATTGTAGCNAAAAACCTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGNCTAAATGTTATACTAA  
CAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGNAATTTGGCTTTCAAAGACGATACGTAGA  
GCTGAGGTGCNTTTTGTAAACCAAGTAACAACAAGAAAGCTACGCTGTNTCNNNATACGACCNTACACGGTC  
GGTGTGTNNCAGNNGGNNCGAGGTCTNNNATGAGGCTGCGAACGAAGTAGACGNCTCACTATNCGATG  
GGTGCCGNGGGCGCGCTACAACGGCGTGGNCTTTNGGCTGCTCTGGACTAAGGGCAAAGGNAATGGACC  
CGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGNGCTCCCGCACTTNTGGCCGTACTIONTAC  
GGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCA  
GGAGGTGTCAGTAGCTCAGGTGCCGGCANGTCGCCGTAAAGTTTCTGTCGGACAAAGAGCGGGCAGTGCA  
TATCCGTCCCCTAACAAGGCGAGGAAACAAAGTGAGTGNCGAACCATGCGANCCTTGGGGGTGCGAGGAA  
GATGCAGGGCGTCNGCAACGTNCACTGGCACTGTTAGTATGCGAGNCACGCAGCTGCAGGTGGGGGACGA  
GCGGNTTCAGCCCGTTAAAATTAAGTGCGGCTCGGGGTCCCGACGCATGGNATGTATTTTCATCGAGGTGAC  
ANACGGTGAAATGGGTTACGTTCCACACCGTGGNCAGTTCATCNGCTACCTAGCTCGTNACGTCCGATGTA  
CACAATAGCGAATGGTGGGTCGGTCCTCAGNCGAAGCATCGTGCTACCAGCCCGCGATAAGATAACCCGCAA  
AGAGTGCATAAAG

>P42\_1, London\_26, VIM-2, 10.12

TCCCTCGTCCCTAGTATGAACCTCTCTTACTGCTGTCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACCTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCTGTCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTCGCGCACTGCC

TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCNACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTTCCCTACTTCCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTGAGCCCCATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTATCACCTCTTTCAGGTTCTTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA

TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGACGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCCCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTACACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTCGAA  
ATCCCATAATACACGTAATACTACTAGCTTACTGAGTTTGCACCGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTCGTCCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGTGACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTATGTTTCCGCTACCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCTCTCGACC  
CCCGCTTCTAGACGATAGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG

TTGGTCACGACGACGGCAGGTCTGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGGA  
TCTGTTATTCCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCCTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGAAGGGTTTTGGTGTACTCTGTGTACCAGGGGTTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGTCCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTGTCGGCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTTAGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTCAATATGTTAACTTTGGAGCATGCTTATTTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTCTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCCAAGGCTCTCGGCGCAGTGCTACA

TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCCGAG  
ACCAACGCCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGGTAGGGGGCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCNATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAATTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGAGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGCCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCGACG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTTCGT

TACAGCAGGGGGGCACCATCTTCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCTTCAGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGGCGAGACGGCCTTCTCGGCAC  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTAAGTATGCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGCGGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTCTGTTAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACG  
GAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGCG

ACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGAT  
GTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAG  
ACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCATT  
TGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGCA  
TATGCCCAAGTTAAGTCTCTGCCGACATGAGACCGGGGAAGTACGATACAAGGATCGTATGGACCCTCAAG  
CCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCTC  
TGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTC  
TAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTTC  
CTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATA  
AGTTTGCCGATTCTGGCGAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCTCTA  
ATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCT  
TAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTTCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTGATGGGTGCCGGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT



GGCCGTA CTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCACTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P44, Wales\_1, VIM-2, 11.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTTAGTGCATGGGCGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTA CTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATNTCAACTTGT  
TTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
TAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCC  
ACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGC  
CGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAAC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGATTGCT  
CGTACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG

AGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTTGTAGCCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTTGTAAACAACCAGATANGCTATTTGTGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGTAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGTC  
CCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATTT  
ACCCTTGTAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAACTCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCGATGGTCTGTAAAACACTATCGGGACCAACCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCAGGTGACGGGACGACTGTCACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGGAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCATAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTTGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC

CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTGAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTCTGTCCTCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTCACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTTCATGTTTCGCGGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTGAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCAGTGTGGCCAGGGTTTTTGTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTGAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTAAGTCCGATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCCGCTGATGGTCCATCCGCGTGTCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCTCGAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGATTTCTGCTGTTAGAAATTTTACAGCGGTTTCATGGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGTAAGAATTGGATGGAGGTTCCGGCTGGTGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTGCGGCTTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGTCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA

CTTGACTCCCTATTGTGTCCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCCGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCCTGACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCATATGTTCCCGATATTGAGCGCTTAAT  
CTATCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCCGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCCTTTTGG  
TCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTTCGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGACAACGAGGCCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGGTAGGGGGCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGAGTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTTCGTAGGACGANGTACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CACTTCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA

AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAACGCCA  
CGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAGC  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTANCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCAACCAGTCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCAGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCGATACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGCAT  
CAGAATATTTGTTGTCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCAGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCCGACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGCAGCATTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCA

AGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATGGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCAGAAGTTGGGAGGAGCTCTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATAAGGATGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTA  
GAGCAGCGAGTAAAGGTGCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTNNNNNNNTATACNNNGGCNNNNNCNNNAGAACNNGCNCAGGATGGGACTCAANNAANC  
ATCAANGNCCTNGNNNNNAATNNNNATGTCTTCTATNNANNGAGCCNATNNGTAGCNCCGTCATAACCNCT  
CGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTACCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGG  
CGAGTCCANGAGTCTCCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTTCCCGGATGAGAGCCT  
CTGGCGACGCCCGGAGGAAACCATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTCTGATGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGCAATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAA  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTTTAAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTT  
CGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAACAGCCGACACT  
GGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGA

GCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCTCAAATCCGCACGCAGGTTACCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATA  
CTCTAATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTTGTGATGAGGCTGCGAACGAAGTAGAC  
AGCTCACTATTGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTAGCCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P8\_1, South East\_10, VIM, 07.09

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACNAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACNGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCAACCACTGGCGCCCCGCCGCATGATC

AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTGGC  
GGAACCCATGCTGCAAGNCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTGCACCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCCGGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCNGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCNGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGC  
TTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGC  
GCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGA  
CCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTAC  
CTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCGGGAGGATTAGATACAGTTCCTCTTGAGCCCTATCCTTTCCGCATACCAAACAGATTAG  
TCACCCCTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGNNTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTTACCCCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC



GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGNGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATNGATACCCGCACTGACATCAG  
TGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGATGCCTATCGTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGCGGCTCACGACGTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGNATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTCGACCCGAGGGGTCCCGACGTACCTTACCCACCT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGTTCATCATGTCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
AACTCAAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGNAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCNGCCAGTGTGGNACAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTACGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGNGTCTACTCCAGGG

TATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTGAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGNGTGTATTTGTACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTTCATATTAGTTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCNTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCCTATTAAGTTCGGAACATCCAATGATGCTTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTNTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGNGNAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGNTTTTGGTGCTACACTCTGTGTACCNGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCCGATCCTGTTGCTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAAGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGNATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCCGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCTGTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGNATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCTGAAT  
CTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA CTGTAATATG  
AACAGCCGGCGTGCGCCGTAAAGCTACACAAAATNTATAGGGTATTTCGCNGAGCAAGTAACGACAGAACG  
AATACCGGCGAGGCTAGNCGTCTGTCTACTATCCTGACTCAACTCAGCCGAAGACGACGGACAGGGTCCCG  
GGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCANAACGCCGATA  
GTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGGGTCTTTT

GAGTCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGA  
CTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCG  
TACAGTTGGCGATCNCATCTGTCTGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGA  
TCGGTGTGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGTAAAGGGGGTTCCACCGCGACAACGAGGC  
GACTGTGTCGACGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCCAAGGCTCTCGGCGCAGTGCT  
ACATGTCNCCATAGGCAACCCGCTTNGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAAC  
TCAGACTCGGACGCAAGCAAGGTGNAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCC  
GAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCTTGAATCTGTACCGCTATTCTGGATAGGAA  
GGAAGTACGAACTAGACGGCCCCGTGTAAAAGACAGCGACAGACAGGAGNNGGATGATCAGTAGCTACCG  
GGTACGCCTCTCAGACTATGGGGGGTAGGGGGNCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCC  
GACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACTACCCCAACATA  
GCATGGTAAGCACTCAAATCCATTGCCATTCGAACGGCGGCTAAGTAGGGGGCTANGCCTTCGTACGGTGT  
ATGTGTACTGGCCGCTTATCTGGGCGACTNGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTGGGGCCCGTATTACCAACGACGCAGACCAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCNTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTCACAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGACTA  
TCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGT  
GTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACA  
GGGACAAACACACGGACTCCACGCCCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
TGGCCATTTCCACTGGCACAGGCAGCGCTGGGGTAGTGGCACNAACGTTCTACGAAAGAGTCNCCGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAANTGGGGCTTCGGACATTGATGTGGCTGTTACAGNCTGGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAA  
NGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTNNAGCGTNCCCCAAGGGAAGGAGCCGT  
AAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCG  
TCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAAC  
GACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCT  
TCGATGTGACAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTGCATTAATACACCGCCGCTTTAAGTCAG  
CGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTA  
ACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGG  
TGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTCG  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATANCGGTGAGGAGCGCTGTAGAGGA  
AGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGT  
GCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAG  
GGTNGACGGGTGGCGTTCCTGGGTAAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGT  
CAAAGTACCCGTAGACCAACCGAGGTGCGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGT



NNNNNNNNNNNNCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAA  
CTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCCTGCGC  
GTGAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCC  
CAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTT  
GGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCC  
CCGGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTA  
ACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACC  
ACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGT  
AGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGAAGTCCAACAAGTCCGCGCTTTG  
CAACTGGGCATAGGAGCATATGCCAAAGTAAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGG  
ATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTG  
ACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGA  
GATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGC  
GCACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATC  
GCTGAGGAGTAGGGAATAAGTTTCCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACC  
CTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTG  
GTTAAACTACAGGTCCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAG  
AGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGA  
GGGATCCGCCCGCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGGA  
GGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTG  
GACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGG  
GGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAAT  
GAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACT  
AGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGA  
TAAGAGCCGACACTGGGTCTAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACA  
GCTATTTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGAC  
TCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAA  
TCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACG  
GTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTA  
CCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAA  
CAGGGACGACTCGACCCGAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGG  
TACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCAC  
ATCTCCCTCNGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGA  
AGATACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCC  
AAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAA  
AAATCTACTCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCGCCGACTCTTGTTATTA  
CGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGC  
TTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTA  
TAACACCTAACAGCAGACATTGTCGGCTCCGAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTG  
CCCGAGAGACCAGCAGGTGCTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAG  
GCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGCCTGAGATA  
GGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGATAGGTACAGAGTCAC  
CAAGGTTTCGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCA  
TCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCC  
CTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGG

GTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTNCTGAGGA  
GGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAG  
CTACGCTGTATCCGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCT  
GCGAACGAAGTAGACGGCTCACTATNCGATGGGTGCCGGGGGGCGCGCTCACACGGCGTGGCCTTTGGGC  
TGCTCTGGACTAAGGGCAAAGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAG  
AGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGANACAATTCTCCCTCCACCGTATAAGTGAGACC  
GTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAA  
AGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCCC  
GAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGC  
GAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCCTAAAATTAAGTGCGGCTCGGGGTCCC  
ACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATC  
NGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAAGCATCGTG  
CTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P49, London\_7, VIM, 01.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTTTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGATCGCCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTNGNACGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTANACCGGTGAGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCAGTGCACATCNTCAGTCCATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCNTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTA

GGATCTGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCT  
CGTACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTNTCCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGAACATTCCGATTTGTGAAGTTATGCGCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGCGGTTTGCCTTGC  
GGAAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCGAGTTCGGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCNCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCATTACGCG  
CTGTCGNGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCNCCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTCCCTCTGAGCCCCTATCCTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTNGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGNCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTATC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACNGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGG  
TCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCCTCCGGTATACATTTCTTCCGCCTTGGCGTGCC  
CCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCCCTCGCGACAACACACTCCGGCGCTC  
ATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
CTAGCCTGCCCTTGTAGCCGCTCACTTAAATCCTGAGGGGCTGAGCAGCTGTGCGCCAGAGTTNGTACTGGTGA  
AGTCGTTTCGATCATCNCTTGTAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTT  
AATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGGGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCNTCGAGAGATAGCGTGCAAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAANGGCATTCT  
GTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGTGCCCCGGCCTTACTAGCCTGCATAGCTAGT  
ATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTNTACGACGGTTG  
TGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTTCGAGCGC  
TCGGCCGACCAGGGCCCACTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGAC  
CCTTGATTA AAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGC

GATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGT  
CGAAATCCCCATTAATACACGTAACACTNGCTTACTGAGTTTTCGNCCGGCGGCTCANGACGCTTACCCCC  
GCCGTGCCCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGAGTA  
AATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
CCACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTA  
CTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATT  
TAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGC  
CCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGTTTTCTGTTCTGTCGCCAGACTAGGTTAG  
GAACCTATCCAGTACCTCTTCCGTAACCTGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGNNCACATT  
AAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCGCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGNNACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCCANCTGGACTTGAGTC  
ACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCTCC  
GTACGGGAGAAGAAGTATTTTTCATGTTTCGCCGTACCCTACGTCGATCANGCTCGCCGGCTCTGCCAGCACA  
CGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCC  
TCTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTCACGACNCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTTGAC  
TGTAGGCCCTCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTC  
AGCCGANACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CNCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAANAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTACGACGACGGCAGGTCCTGGNCCCGCCATCGCTGGAGCCGNCCGCTGATGGTCCAT  
CCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CCGCTCTGCNCCCTAGTCTGCGTCTGTNGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATC  
GAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATG  
CTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAG  
TGGACGTGCCCTTGCNACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTACAACATCAC  
CATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGG  
GAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAG  
CTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAG  
GTCAAGCTGTAAGGTNGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAA  
CCGGGAGCGGCAAAATATTGCTTTGTATNTGACTGCGGGTGTGTCGCCATGGGGCGNNTAGTCGACTCCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAA  
CGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCA  
CCTACCCCGGTGCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC



AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTANNTGTACGTGCC  
CCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATA  
TTTGATAGTTCATAGCNTGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGG  
GCTCNAGATTTGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCCTGAGNGCGCTGTCTA  
CATCCATGGCGTCCCTATACCTTAGTCGGATCCTGTTCTGGCCATACAGAAAGCTGGGGGCACCGGGAT  
TGCACGGCAGCGCGAGGTGATGTCCAGGGGCANNGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAG  
CGATAGNACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGTGTAGCNAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GGTTTTTGCGAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCATGATAGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCTGTGAGCACTTCTCTCCTG  
AGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGA  
GCGCTTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTG  
CGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGC  
CTGCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAAT  
GCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGG  
TGGTACGAAACCGCACTCGGCAAGCGNAGCTCTTATTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGC  
ACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAAGGGGACAGCCGAGAAAGACCAGGTGCG  
AGTAGGTTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTANAC  
TCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAC  
TCGTAATATGAACAGCCGGCGTGCTCCGNAAAGCTACACAAAATCTATAGGGTATTGCGCGAGCAAGTAAC  
GACAGAACGAATACCGGCGAGGCTAGTCGTCTTCTACTATCCTGTACTCAACTCAGCCGNAGACGACGGACA  
GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACA  
ACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGTCCCACGCCCAAGGCTCTCGGCT  
CAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGAAGGGATTACATCTCGCTCGGGGGCAAGTNGGATGAG  
GTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGNCAAACCCTCCTTGAATCTGTACCGCTATTCTGGA  
TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGNGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCGACTGAAAGCGGGTGTGCAACGTATAGCCGCTAGAGGATCTACGGCGTCTGTATANACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCNCTCGTAC  
GGTGTATGTGACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCNT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAAGTCGGGGCCGATTACCAACGACGACAGACAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGANGATCGTCGTAACCCCTGTGAGTGCATACCCNA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCCGCC  
TGACTATCGACCCGCGTGTANCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGNTCCTCTC  
TGGGTTGTGCGCTTGGTCTGAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCACCAGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCA

TATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGNNCTTATACTCGACCACGTTGCGAGTACTACC  
GCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGAGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAANNCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCC  
ATTCAAAGAACCCNCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCGAG  
GTATCGTTCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC  
GGGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCACCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCCGGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCANCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGA  
ATGAACGACGAGACCCCGNGAACTTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAA  
GGCGTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTA  
AGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATA  
GAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAAT  
CGCGGGTGTATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCNGGCTATCAGTTGAAGTTATAGGTCA  
GGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGT  
AGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATG  
AGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAC  
GGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGTGGCTCGAGCGGTCCATGAATCAGG  
TTGATGTCAAAGTACCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTC  
CGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCCG  
GACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGC  
GCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTCA  
CGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGC  
GACGCAAAGAAACCAGACCCCCAGTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATC  
CGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTNGCCTGGCCANAGGAGAGGCTATGGCGTC  
CAATTAGGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCANGCGCGTTCGTTACGCCAGTGAAT  
ACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGCGGAGCAAACGGTAGGCGAGGA  
ACAAAGTTAGCTATTCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
ACNTCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACNTA  
TGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAG  
CTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGG  
GCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTAAAA  
GCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAA  
GCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGC  
AAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGA  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGG  
CCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCT  
GGTAAGAACTTTAGGGAGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAA  
TCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGT

ATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCA  
GAGCAAGAAGTTGCTTGTAACTGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTA  
CAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTT  
AGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTG  
CCAAGATATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAA  
ACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCNGT  
GAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGT  
TATAAAATCCAGGTTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATCCGGCAACCGTAATCCCGA  
CAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCNGCCGAAC  
GACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTG  
CGCTAGCATTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTG  
GACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGANAG  
TATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATG  
AAATTGACGAAGCTCATTGGNACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATG  
ACACGCAGACAAAGACATCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTC  
AGGTTCCAATGGCTGCACATGTATAATTGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACC  
CCGCTCCAAGTGCAGCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGG  
AGCTCTTGGCATTTCAGCCATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAA  
TGTCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACA  
TTCCGCGGGGGGTAGAGCAGCGAGNAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCATGGGGGCATGG  
AAGATTGTCACCATAAGCAGGGAAACNTGTGGTGTAGGTAGCGAGGGGCCAAAGGAGGGACCCGGAGTTAT  
CATCTACCCCGCAGGGGGGAAAGTTCCAGAATCAAAGTATGAGGATAAACACACCAGAGCATCTCAGAAGA  
CGGTGGAGACTGCTTAATCTGATGTGCNAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTG  
GGAGAAGTACGCTATCAGGAACTATGTGAGTACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGA  
CTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGT  
CATAACCCCTCGAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAG  
TTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGA  
AAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAAT  
GGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGA  
GTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTCAAGGTGAGAACAAGGATATGTATGCCACTCCCCGG  
ATGAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGG  
AGCCTGTATTCTAGATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACC  
GCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGT  
AGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAA  
CTGGGCATAGGAGCATATGCCAAGTCAAGGTCTCTGCCGACATGAGACCCGGGAACTGAGATAAAGGATC  
GTATGGACCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACG  
GAGGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGAT  
AAAGTAGGGCCGTCTCGCCCTTACTCATGGCCCAACAGTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCA  
CCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGCACTCGCGTAACAAGATATTGCCAGCGGATCGCTG  
AGGAGTAGGGAATAAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTG  
TGTTAATGTGACGAGATGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAA  
ACNACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTANGGTAAAAACCCAGGCAAAGAGAA  
ACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAANTGACTCACCTTTGAAAGTACGCGCGGAGGGA  
TCCGCCCGCTAAGAAANGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGAT  
NCACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGAAC

ATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAA  
AGGTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCATCGTAATGAG  
GAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGG  
GCCCAATTTTTCGCAAGAAAGACTAAAGGTGCGACAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAA  
GAGCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTA  
TTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCA  
GGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCA  
AGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTA  
TGATACCTTACCCGGTCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCA  
AATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGG  
GACGACTCGGACCTCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCTGTCTGTTTTGCGGTAGTA  
GTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTAGTAGTGCCAGCAGAGTAGCTGCACATCTC  
CCTCNGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATA  
CCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCNAGCGGGACACTACGTTGATGCTCCAACT  
GATGGAGCCGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGTGGGACGGAACGANAAATC  
TACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATC  
TTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGT  
AATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACA  
CCTAACAGCAGACATTGTGCGCTCCGACGGGCCGGTACGGGAAAAGAGGGGGACCAGCAGACGTTTGCCCGA  
GAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGT  
GTCGAAAATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTAC  
AGCGCTTATAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGG  
TTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATNCGTCAGCATCAA  
ACCTTACGNGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGC  
TATCCGGCTATGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGGTAGC  
GTCAAAGGCCGCTAAATGTTATACTAACAAGAGAGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAG  
CAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTNTTTGTTAACCAAGTAACAACAAGAAAGCTACG  
CTGTATCCGAANACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAA  
CNAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCT  
GGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAG  
CTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGG  
GAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTGAGTACTCAGGTGCCGGGCAAGTCGCCGTAAGTTTTC  
TGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAAC  
ATGGGATCCTTGGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGC  
CACGAGCTGCAGGTGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGGTCCCAGCGC  
ATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGT  
ACCTAGCTCGTAACGTGCGATGTACACAATAGCGAATGGTGGGTCGGTCTTACGGCGAAGCATCGTGCTACC  
AGCCGCCGATAAGATAACCCGCAAAGAGTGCATAAAG

>P60, London\_6, VIM, 11.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
NCGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC

TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCCTATCGTCTGCGGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTGTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGCGGTAACATGAACCGGTTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGCTTTGCCTTTGCC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAAGGCGGGTCCGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAAGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCTGTGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTGTCT  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGAAGCCCTANCCTTTCCGCATACCAAACAGA

TTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGGTTCGCATCCT  
GTTTCGGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTNGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGG  
TTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGC  
TGTCCTAATAGATGTAAGTGCATCAGAGTGTTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGTGCCTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTGAGTGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTA  
TCCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTTCCGTAGTCTCACGACGATACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTGTAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGATGGCCCTGGCCTTACTAGCCTGCATAGCT  
AGTATCTGGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAG  
CGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATT  
GACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTT  
ATGTCGAAATCCCATTAAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCC  
CCCGCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCCTTACTATGA  
GTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGCACGGATCTTAGCTGTGCCCTTCT  
CTTCCACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGCGGACAGAGAATGTGGTTTTC  
CTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGAGATCCAAATATGCGGGTACCTTTACGCCGTTTTCTGTTCTGTTCCCGACTAGG  
TTAGGAACCTATCCAGTACCTTTCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCA  
CATTAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTA  
TACGCGCCCCGCTGGGNCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTAC  
TACGCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGTCCCGACGTACCTT  
ACCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGAT  
TCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAG  
TCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCT  
CCGTACGGGAGAAGAACTATTTTTCATGTTTTCGCCGTACNCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCA  
CACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTACATCATGT  
CCTCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATC  
GAGTGTGACCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTT  
GTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGG

TAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTG  
ACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGNTACATCGTTGGTAGATAAACGA  
GTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGA  
TTAGTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGNTGGCCAGGGTGTTTTGTCTGACCTCCATCCAGATCAT  
TCAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAAGTC  
TACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTG  
TAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACAGCGGGCACTACTAATGGTACCAGTCCCCGCATCT  
AGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAA  
TTCTCTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGT  
ACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCT  
TACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCA  
TCCGCGTGCTCATGCCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGT  
TCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATAT  
CGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGAT  
GCTTTACAGGTCACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCA  
GTGGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCA  
CCATGAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGG  
GGAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAA  
GCTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACA  
GGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCCGAGCTAAAGAA  
ACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTGCGCCATGGGGCGGCTAGTCGACTCC  
TAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACA  
ACGGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTC  
ACCTACCCCCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGA  
GTTGCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTC  
CAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCAACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCTTCTAGTCACTGAGTACGATA  
TTTGATAGTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGG  
GCTCTAGATTTGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTA  
CATCCATGGCGTCCCTATACCTTAGTCGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGACCCAGGGAT  
TGCACGGCAGCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAG  
CGATAGAACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GGTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTTCGCAAGTGGAAGTGTCCCGTGGACTTCTCTCCTG  
AGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGA  
GCGCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTG  
CGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGC  
CTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAAT  
GCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTGGG  
TGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGC  
ACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCG  
AGTAGGTCGGGTTTCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATAC

TCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAC  
TCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTTCGCCGAGCAAGTAAC  
GACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCACTCAGCCGAAGACGACGGAC  
AGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGA  
ACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGAC  
GGTCTTTTTGAGTCCGCCCGGACACCGTGCGGAGGATCCGAATTTGTCTCTGGTCTAAAAGGCTCGGCA  
ACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTC  
AGGGTCCGTACAATTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAGGGGGGTTCCACCGCGA  
CAACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGG  
CGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGC  
AGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCCGGATG  
AGGTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTG  
GATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGT  
AGCTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAG  
TCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCC  
CAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGT  
ACGGTGTATGTATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCTTAGTACGTGGGCGCAGC  
CTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGGCCNTATTACCAACGACGCAGACCA  
AAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGTTCAGAAGATCGTCGTAACCCTGTCAGCGCCATACCCCC  
AAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAG  
CCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGCTTCGCC  
CTGACTATCGACCCGCTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTC  
TGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGGCAGCCGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCCGATGTCA  
TATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAGCTGCGAGTACTACC  
GCTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCC  
ATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCGAG  
GTATCGTTCCCTATCGACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCANACCTACCAAGCGGTCCCAAGTAGCCTAACGG  
CGGGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGTACGTCCCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGACAAGGGGAAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGCCGCTTTAA  
GTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATC  
GCGGGTGTGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAG



GCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTA  
GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGA  
GGAGTGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACG  
GAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCCGG  
ACACGAAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTTAC  
GGTGGTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCG  
ACGCAAAAAGAAACCAGACCCCCAGTGAAGTGGCGTGTGTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTGTTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAC  
ATCCGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGGATTGCCGCTGCTAGGCGGAAGTGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCC  
ATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG  
AAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCATCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA  
AGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCCGTATGA  
GAGCCCACGGGGGAATCCTCGCTGCGTGTGTTGGGCGGGTGGTCCATCCCGAACCGCCACGTAGCAGAGC  
AAGAAGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT  
AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTAAAGATTGTCGCGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCT  
AGCATTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGATGATAGTATAT  
GGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAAT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACG  
CAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTT  
CCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTC  
CAAGTGCAGCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTGAGAAGTTTGGGAGGAGCTCTT  
GGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTAAAAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTG

TCACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACC  
CCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGGA  
GACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAG  
TCACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGC  
AAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCC  
TTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGG  
AGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCA  
TAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGT  
GGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAAT  
GTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATNCCACTCCCCGATGAGAGC  
CTCTGACGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTA  
TTCTAGATGTAAAGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCC  
ACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCC  
CTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCAT  
AGGAGCATATGCCAAGTTAAAGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGAC  
CCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAA  
AGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAG  
GGCGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGG  
AAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTA  
GGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAAT  
GTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAG  
GTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGATGGTAAAAACCCAGGCAAAGAGAAAACAACGTA  
ACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCG  
CCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGT  
CCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTG  
ATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGA  
GGCGGTCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGG  
GTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATT  
TTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGAC  
ACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATG  
GAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGAT  
ATTCTGAAGCCTATACGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATC  
TACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTT  
ACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCAAGTGGAGTGGTACCCAGATACTGA  
ATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTC  
GGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTGGTCT  
AAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGC  
ATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAA  
GGAACCCCTCTCTGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGC  
CGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAAACGAAAAATCTACTCCGAC  
GGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCT  
GGATGCGAGACCGATAGTTGTCTGCGTTAGTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGA  
GGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGC  
AGACATTGTGCGCTCCGACGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGC  
AGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAAT

ACTCTCATGTAAAGAAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTAT  
AAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCA  
GGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTGAGCATCAAAGCCTTACGT  
GGGTGCCCGGTGCCGCAAGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGCTATCCGGCT  
GTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGG  
CCGCCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGG  
CTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCC  
GAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATAACCGCAAAGAGTGCATAAAG

>P20, London\_17, VIM-2, 05.10

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
NTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCCGAGTCCGACCCCATCATCTCAACTTGT

TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTTCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACC  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGACTAGGGCGCCCACTCCCGACTCTGGGACGTCTNATCAATGCGGACTGACTCCACGCTCCTCC  
TCGCNGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGC GATTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTTCGCGGTACGATTGCTAAGATATCCATTACG  
CGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCG  
ACCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTTAT  
AAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGTAGCCCCCTATCCTTTCGCATACCAAACAGATTA  
GTCACCCCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTTTTT  
CGGTTCTCTTGTAAACAACCAGATACGCTATTTGTGGCAACGCCATCCTATAACGCACGTAATCGGGATGGG  
TCCTTGCCTTCGTCCCGATAGCGTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCT  
TACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGGTCTCCTTCCATATCATNTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTA  
CGAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGT  
CCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTAGG  
TTCGGCGTGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTTCGGTGGG  
GCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATT  
TACCCTGAGCTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACA  
ATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCG  
TCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCC  
CCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTC  
ATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
CTAGCCTGCCCTTGTAGCCGTCATTTAATCCTGAGGGTCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGA  
AGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACCGG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTGTAAAGCTCAATGAAAGGCATTCTG

TGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA  
TCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTCTGTTTCACACTGTGCCACTGACGTTTTACGACGGTTGT  
GACTCGTGGATGCCTATCGCTTTTTCTTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCT  
CGGCCGACCAGGGCCACCCTCGCGGACCGCTTTGTGCTGCGGCCCTCCCCCAATATCTTCTTCCATTGACC  
CTTGATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTC  
GAAATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCCGCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGCTGGGGTCCCTCCCTTACTATGAGTAAA  
TGTAACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCC  
ACATCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTGGTTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGTTTTCTGTTCTCGTCCCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTTCCGTA ACTCGTGGTGTGCGGTTCCCTGCCAACTATTGTAATGGCGAGCACATTA  
AACCGCTGGGTAAGGCGCACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACG  
NGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGCGGTCACTACG  
CCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCCGAGGGGTCCCGACGTACCTTACC  
ACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGTTCGGGGATTCCC  
CGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCA  
GACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGACCCACACAGGGGAAGTCCTCCTCCGT  
ACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCGGTCATCATGTCCTCT  
CGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCC  
GGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCGTGAGGCTTCTTCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTC  
CAGGGTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTTAGTAGCTTCATATCGTCTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCT  
GAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTAT  
TGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT  
ATCCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTT  
CAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAGTGG  
ACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAAATCACCAT  
GAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTT  
CCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCNCTGATTGTAGCTCGGGAACAGGTC  
AAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTCTCGCCGAGCTAAAGAAACCG

GGAGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTAGA  
ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGG  
TCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTCACCT  
CACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAAT  
CACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAG  
AAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTACCCTTCTAGTACTGAGTACGATATTTG  
GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGGCTCT  
AGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCAAGGCT  
TTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGTGTCTACATCCA  
TGGCGTCCCTATACCTTAGTCGGATCCTGTTGNGGCCATACAGAAAGCTGGGGGCACCAGGGATTGCAC  
GGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATA  
GAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTGTCACTGGTGAACGCT  
TCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGTTTTT  
TGCGCAATTCTACGGGACGCACCCGGCTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTG  
ACGGATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTA  
GAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCNATACGTTCCCGATATTGAGCGC  
TTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAA  
GAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTANTAAAGTGGCCTGC  
GAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCAC  
AGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTGGGTGGT  
ACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACAT  
GACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGTTTCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTC  
GTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAANATCTATAGGGTATTCGCCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCAGAAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACCTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGCTTATNTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCN  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGCTATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCA

AAGAGTTC AATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTTCGTTCCGCC  
TACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCG  
GGATAATAGGTGTAGGAGCGACAAGCCANCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCA  
GCGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAANATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACCGGTG  
GTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GAATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCAGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA

TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGGTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTGTCGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTGAAGTCTTCAGGTTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGG  
GGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTGCACGAAGGAAGACTGGGAGAAGTAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTACATAACCCCTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCT  
GGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAAAGGATCGTATGGACCCCT  
CAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTCCCGCATTCTGGCGCAAAAATCTGGCGCCCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG



ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTT  
GCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCCCAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACCGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGACAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGACATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCTGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P19, London\_7, VIM, 05.10

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGTGGAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACCTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACC  
ATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACTGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTAGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGTTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT

TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACNCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCNGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCCCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATNCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCNATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTCTCCGTAGTCTCACGACGATACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA  
TCTGGGGTGAGCAGCGGCCTTGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGT  
GTAATCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCT  
CGGCCGACCAGGGCCACCCTCGCGGACCGCTTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGACC  
CTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTC  
GAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCTCCCTTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCC  
ACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCCGGTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTTCCCGACTAGGTTAGG  
AACCTATCCAGTACCTCTTCCGTAACCTCGTGGTGTGCGGTTCCCTGCCAACTATTGTAATGGCGAGCACATTA  
AACCGCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGC  
GCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGC  
CTCCCTTTTACAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTACCCA  
CCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCC  
GCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTAC  
GACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGT

ACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCT  
CGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCANGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCC  
GGACAACACTCAAAGTCGTGTGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTC  
CAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTCGCATAACCCCTGTGCGACATGAGCACCNATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCT  
GAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGACGCTAGTGGCTTACTAT  
TGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT  
ATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGAACATCCAATGATGCTTT  
CAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGG  
ACGTGCCCTTTCGCGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAAATCACCAT  
GAGGATCTGTTATTCGGGCCGCTCCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTT  
CCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTC  
AAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTCTCGCCGAGCTAAAGAAACCG  
GGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGA  
ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGG  
TCCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTACCT  
CACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAAT  
CACATTCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAG  
AAGGAACCACCGCAAGTTGCGTGACGGTCCGCTCAGTACCCTTCTAGTCACTGAGTACGATATTTG  
GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTTGGGCTCT  
AGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCAAGGCT  
TTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCA  
TGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACG  
GCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGGTTTTT  
GCGCAATTCTACGGGACGCACCGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTGTTCGCAAGTGGAAAGTGCCCGTGAGCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA

ACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAANCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCAAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAAT  
CTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGT  
AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCTGTACTCAACTCAGCCGAAGACGACGGACAGGG  
TCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGC  
CGATAGTGGCGCCACTGAAGCCCAAGGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCG  
ACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGG  
GCTCCGTACAATTGGCGATCTCATCTGTCTGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACG  
ACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAAC  
GAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGTAGGTTCCACGCCCAAGGCTCTCGGCGCA  
GTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATC  
GAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTT  
GCCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGATAG  
GAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTA  
CCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCCAGTCTAC  
GCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACACTACCCCAAC  
ATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGG  
TGTATGTGACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCA  
GCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCACTCGGGCCCCGATTACCAACGACGCAGACCAAAAG  
AGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCNTCGTAACCCCTGTCAGCGCCATACCCCCAAAG  
AGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAAGAGCCCT  
ACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGA  
CTATCGACCCCGTGTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCNTCTCTGG  
GTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATA  
CAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCCGATGTCATATA  
ANAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTA  
CGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCG  
TCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAG  
TCCCCTTACAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCA  
AAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGACTACGAATGCAGTGCA  
GAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCC  
CACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATC  
GTTCCCTATCGCACATGGCCGNCTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGC  
GAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGC  
GCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCGG  
GGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTA  
TACACTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATTTT  
AACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCG  
TAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGC  
GTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAA

CGACGAGACCCCGNGAACTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGC  
TTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGNTTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCAAGACGGCCTTCTTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCNTGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAA

TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCNNAATTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGG  
GGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCATCATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGTTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTGAAGTCCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTAGGGCGCAAGGGGAAAAGNGCGGGCAGGTAGAGGTAAACGTTCCCTTGCCGGCTGTTG  
AGGANTGTTGGTATCATCGACGGCTATAACCGTGGCAGAACAGAGACGCTTAGATGTAGTAGGCAGCCCTCC  
CATTTGTGAAAGTCTGAGCATGCCTGTTTGGGAAGGACTCACTGGGTTCCGCGCGTTGCAACTGGGCATAGG  
AGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGGATCGTATGGACCCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAAGTACGCGCGGAGGGATCCGCCCCCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACAGGGGAAAAGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTC  
GCAAGAAAAACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTGATCGAGAGAGTGAATAGGGCTGGCCATTAAGAACTGATTACAGCTATTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCCGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTCGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG

GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P54\_2, London\_24, VIM-2, 04.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGCGAGGGTCTTTCTCGTCTATTCCGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTNGTGTGAGTGAAGGAATG  
TGACCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGCGATCTTGTCTACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATG



TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTC  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCA  
GCCGATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTGCCTCGACGTATTGAACCTCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCTATCCTCTCCATGCCCNCGGGT  
GCTCGTACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTGGGCCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCTGCGTCCCCCTTATACATCGCCA  
CGAGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGC GCGTTTTGCCTTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTCCCGTCCGTGACTC  
ACGAACATTTTTCGGCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGGACACCTCATGTTCTGCCA  
TATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTG  
ACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGG  
AGTGGCCTTGTA TAGGGCGCCCACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCC  
TCCTCGNAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCACGCTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTT  
AGCTTACC GCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTA  
CGCGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCAC  
CGACCCTACCGCACAGGGGACTATNCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACNG  
ATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCC  
TGTTTCCGGTTCCTCTTGTAAACAACAGATACNCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGA  
TGGGTCCCTTGCTTCGTCGATAGCGTAAATTTCTTGAGGCCCNCGCACTGCCTACAGATTACTAATGATGG  
AGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTG  
GTTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCT  
TTTACGAGAGTAATCATTGTTACTATTGGGTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGG  
CTGTCCCTAATAGATGTA CTGATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGT  
TAGGTTCCGGCTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGG  
TGGGGCGCTGCGTTAGATCGAACGCTCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCG  
CGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTG  
CGACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATC  
GTTCCGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGG  
CGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCCCTTCTCGGACAACACACTCCG  
GCGCTCATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGATCC  
AACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTAACTCCTGAGGGCTNAGCAGCTGTGCGCCAGAGTTTGTACT

GGTGAAGTCGTTTCGATCATCNCTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTA  
TCCTTAATCGTCACGCCGATGGTCCTGTAAAACATCGGGACCACCCGCCGCATCTTATCGATAACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCNGATTTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACNCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCT  
AGTANNTGGGGTGAGCAGCGGCCTCGTCCCGGTTTTTCTGTTTCACACTGTGCCACTGACGTTTTACGACG  
GTTGTGTAICTGTTGACGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCGA  
GCGCTCGGCCGACCAGGGCCACCCCTCGCGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCAT  
TGACCTTGATTAATAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTACTCATGTACGCGCTCTTTGCT  
CAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGT  
TATGTGAAATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACC  
CCCCGCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTTCTTTACTATG  
AGTAAANGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTC  
TCTTCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTT  
CCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGAT  
AAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACC  
ATTGCCCTTATTGTGACGGGGAGATCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTCGCCAGACTAG  
GTTAGGAACCTATCCAGTACCTCTTCCGTAACCTCGTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGC  
ACATTAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTT  
ATACGCGCCCCGCTGGGCCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGTC  
CTACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACT  
TACCCACCTTAAGGCCATAGCTGTGNGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCNTCGGGG  
ATTCCCCGACCCGCCACGTGTGGGATNACCCGAAACGTAGGCGTGTCTGCGCGCNTTGGCCACCTGGACTT  
GAGTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCT  
CCTCCGTACGGGAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAG  
CACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATTAT  
GTCCTCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCA  
TCGAGTGTACCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATT  
TTGTCCGGACAACACTCAAAGTCGTGTGCGGGTCCAGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGG  
GTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGTATCCCAAACCGGTTTTCTGATGACTCGTTT  
GACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACG  
AGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGG  
ATTAGTCGTGCCGTGAGGCTTCTTNCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCA  
TTCAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGT  
CTACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGT  
GTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATC  
TAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTA  
ATTCTTTTTGCTGGAAGACCATAACGAGCTCCATCGCGGGTGGCNGGCATGCCCCAGCGGCGTGTATTG  
TACTCCTGAGCAGCTGTAGAAGGTGTGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGC  
TACTATTGCCGTTGGTACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCC  
ATCCGCGTGTCTATGCCTTNTAATAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCC  
GTTCCGCTCTGCNCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCAT  
ATCGAATATCCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATG  
ATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCG

CAGTGGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACAT  
CACCATGAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACAT  
GGGGAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATT  
AAGCTTCCTTCATACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAA  
CAGGTCAAGCTGTGGGNAGTTGGCTAAGAATTGGATGGAGGTTTCGGCCTGGTCTTCGCCGAGCTAAAG  
AAACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACT  
CCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAA  
CAACGGTCCCGNAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCAC  
GTCACCTCACCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCC  
GAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTATGTACCAGGGGGTTATTTACCATTTG  
TCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTG  
CCCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCT  
ACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCTCCCTCAGTCACCCTTCTAGTCANTGAGTACGA  
TATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCNCCCCGCTTTTTG  
GGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACATAATCTTTTC  
AAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCT  
ACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGGCCTATACAGAAAGCTGGGGGCACCAGGGA  
TTGCACGGCAGCGGAGGTGATGTCCGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGA  
GCGATAGAACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTNTGTCACTGGT  
GAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCG  
CGTTTTTTCGCAATTCTACGGGACGCACCCGGCNTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCT  
AGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCT  
GAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTG  
AGCGCTTAAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCT  
GCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGG  
CCTGCGAACGTCAGATGGGCCGGCCACTGNAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAA  
TGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGG  
GTGGTACGAAACCGCACTCGGCAAGCNCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAG  
CACATGACATTCCGCCACAAGCTCTNCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGC  
GAGTAGGTCCCGTTTCGAATATGTTAAATTTGGAGCATGCTTTATTTCGNACTCGGGTTGGGGATCTTTCTATA  
CTCAATCTGAATCTTCTCTAAGCGAGGATTACANCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGT  
ACTCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAGTA  
ACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGG  
ACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCA  
GAACGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCG  
ACGGGTCTTTTGTAGTCCNCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTTCGG  
CAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCG  
TTCAGGGCTCCGTACAATTGGCGATCTCATCTGTCCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGC  
CCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAAAGGGGTTCCACCCG  
GACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGTAGGTCCCACGCCCAAGGCTCTC  
GGCGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACA  
GCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGA  
TGAGGTTGCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTC  
TGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGNTGGATGATCA  
GTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCT

AGTCTACGCCGACTGAAAGCGGGTGTGCGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTA  
CCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTC  
GTACGGTGTATGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCCGATTACCAACGACGCAGAC  
CAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACC  
CCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAG  
AGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCGTTCCG  
CCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTTNT  
CTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGG  
GCAATACAGGGGACAAACACACGGACTCCACGCCGNCTTTTTGACTGAATCGCGACCTACTTGCCCGATGT  
CATATAATAAAACGAGACCGGGCCCTACAGTCGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTA  
CCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAG  
TCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGA  
TCGGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCC  
CGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATG  
CANTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCA  
ATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGC  
AGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTA  
GCGAGCGAGCGGAATCGGATCGAATGAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTG  
AGGGCGCTGACAGCCATCCACTNCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAAC  
GGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTG  
GCCGTATACACTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATA  
AATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA  
GGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGACCAATTGCCTNCGGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACC  
CGAATGAACGACGAGACCCGTGAACTTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCA  
NAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGT  
TTAAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGA  
TACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGG  
AATCGCGGGTGTATGCCCTGTGAAGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGG  
TCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGC  
TGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCG  
ATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAA  
CACGGAGAGAGTGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATC  
AGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGG  
GTCCGTAGGTGCGTGACCTACAGCGAAAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCT  
CCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGAC  
AGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGT  
TCACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAA  
GGCGACGCAAAGAAACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGA  
ATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCG  
TCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAAGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGA  
ATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAACCGGTAGGCGAG  
GAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGC  
AAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACC

TATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAA  
GCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAG  
GGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAA  
AGCCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAA  
AGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGG  
CAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCNAG  
AACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACG  
GCNTTCTTCGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGC  
TGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAA  
TTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGGTACAACGCCGCCG  
TATGAGAGCCCACGGGGGAATCCTGCGCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGC  
AGAGCAAGAAGTTGCTTGTAACTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGT  
ACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGT  
TAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCT  
GCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAA  
AACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGG  
TGAGGACTTTAATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCG  
TTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCG  
ACAGCGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAA  
CTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCT  
TGCGCCTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGT  
GGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATA  
GTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGAT  
GAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATA  
GACACGCAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTT  
CAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTAC  
CCCGCTCCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGG  
AGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAAT  
GTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGANTACAT  
TCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGA  
AGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATC  
ATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGAC  
GGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGG  
GAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGCCTAAGAACGAGCCCAGGATGGGAC  
TCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTC  
ATAACCCTTCGAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTT  
AGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAA  
AGGTCATANCTATTTAGAATCCCTAGCCACAGNTCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGG  
CGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGT  
AAGAATGTCACACGGAGCCACGGAGTGCTTTTGAAGGTGAGAACAAGGATATGTATGCCACTCCCCGGAT  
GAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAG  
CCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCANCCG  
TGGTCCACAGGAGACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAG  
GCAGCCCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACT  
GGGCATAGGAGCATATGCCAAGNTAAGGTCTCTGCCGACATGAGACCGGGGAAGTGAAGTACAAGGATCG

TATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGG  
AAGTTAAAGTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATA  
AAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCCTACGAGGCTAATCGCACCCCTGCGCAC  
CGAAGGAAATTTTCCTCGGGCGGTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGA  
GGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGT  
GTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTAAA  
CTACAGGTCCTAATGCTTCTGCTCGCGCATTGTTGAGGGCTGTATGGTAAAAACCCAGGCAAAGAGAAAAC  
AACGTAACGATCTGGTTGGAGCTCTTGCTATACTGNCAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATC  
CGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATAC  
ACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTAT  
ACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAAG  
GTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGA  
GTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGC  
CCAATTTTTCGCAAGAAAGACTAAAGGTGCGACAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGA  
GCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATT  
TTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGG  
CCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAG  
GCAATCTACTTCTATTAGGGTGGGNATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATG  
ATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCNAG  
ATACTGAATTGCCAGGTCGAACATCTAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACCGGAACAGGG  
ACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTA  
NTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTC  
CCTCCGGCATCGAGAAGGGCGGTTGGCGCGTACTACTATAACTGAGCAGTGGTCACTCTAGCTGAAGATA  
CCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACT  
GATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATC  
TACTCCGACGGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATC  
TTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGT  
AATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACA  
CCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGANGTTTGCCGA  
GAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGT  
GTCGAAAATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGANGGTTACGATTGGCCTGAGATAGGTAC  
AGCGCTTATAAATGGGGCGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGG  
TTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAA  
GCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGC  
TATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGC  
GTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCGAG  
CAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTACAACAAGAAAGCTACG  
CTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCTGCGAA  
CGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCT  
GGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAG  
CTCCCGCACTTACTGGCCGTACTATACGGNCGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGG  
GAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTC  
TGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCCCGAACC  
ATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCC  
ACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGCGGGCTCGGGGTCCCGACGCA

TGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTCCACGTTCCACACCGTGGGCAGTTCATCGGCTA  
CCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCCTTCAGGCGAAGCATCGTGCTACCA  
GCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P37, London\_28, VIM-2, 07.12

TCCCTCGTCCCTAGTATGAACCTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCNTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACNAGTATGC  
CCTANCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGA  
CACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGA  
TTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCTGCCCAAAGCGTTTAGCCAAACAAAT  
GTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGGCGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
TGTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGAT  
CTTTAGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGC  
CCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACC  
AGCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTTGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGCTTGTCTCCTGCNCAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCT  
ATCCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGC  
CACGAGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTTGTGCCGGACTGGTGGCGGTTTGCCT  
TTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGCAGTTCCCGTCCGTGAC  
TCACGAACATTTTTTCCGGCCCCCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGGTTTGT  
AGTGTATCACGCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGGACACCTCATGTTCTCGC  
CATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGG

TGACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCGGA  
GGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCT  
CCTCCTCGCAGGTAATCTCTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGC  
TCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAG  
TTAGCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCAT  
TACGCGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACC  
ACCGACCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTT  
GTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACAGTTCCTCTTGAGCCCCATCCTTTCCGCATACCAAAC  
AGATTAGTCAACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCAT  
CCTGTTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTGAGGCCCGAGGCACTGCCTACAGATTACTAATGAT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTT  
TGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCG  
CTTTACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGG  
GGCTGTCCCTAATAGATGTAAGTGCATCAGAGTGTTCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGAT  
GTTAGGTTTCGGCGTCTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTC  
GGTGGGGCGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCG  
CGCGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGG  
TGCGACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCA  
TCGTTTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTT  
GACGTGCCCCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGTTCCTCGTGCCCTTCTCGCGACAACACACTC  
CGGCGCTCATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTAC  
CCAACGCCCTAGCCTGCCCTTTGTAGCCGCTACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
ACTGGTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGT  
GTATCCTTAATCGTACGCGGATGGTCTGTAAACTATCGGGACCACCCGCGCATCTTATCGATACCCGCAC  
TGACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTGCTCCCTACGG  
TAACGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTTCCGTAGTCTCACGACGATACCA  
TATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGG  
CATTCTGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATA  
GCTAGTATCTGGGGTGAAGCAGCGCCTCGTCCCGTTTTTCTGTTTTCACACTGTGCCACTGACGTTTTACGA  
CGGTTGTGTAAGTGTGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATNGTCAATGGAGGGGGTGC  
GAGCGCTCGGCCGACCAGGGCCACCCTCGCGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCC  
ATTGACCTTGATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTCTTG  
CTCAGCGATGCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCC  
GTTATGTGCAAAATCCCATAAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTCA  
CCCCCGCCGTGCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCTCCCTTTACTA  
TGAGTAAATGTACCATTAATCAGTGAAGCATTGGAGGTACGATTGCGGGCACGGATCTTAGCTGTGCCCT  
TCTCTTCCACATCCCCAGATTACCAAATTCGCGCGCNGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGT  
TTCCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAG  
ATAAATTTAGATTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTA  
CCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGCTCCCGAGACT  
AGGTTAGGAACCTATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGA  
GCACATTAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGAC



TTTATACGCGCCCCGCTGGGCCCCGTCGCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGT  
CACTACGCCTCCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCCGAGGGGTCCCGACGTAC  
CTTACCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGG  
GATTCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTT  
GAGTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCT  
CCTCCGTACGGGAGAAGAAGTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAG  
CACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGTCCATCAT  
GTCCTCTCGACCCCCGCTTCTAGACGATAGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCA  
TCGAGTGTACGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATT  
TTGTCCGGACAACACTCAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGG  
GTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTATCCCAAACCGGTTTTCTGATGACTCGTTT  
GACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGNNGATAAAC  
GAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGG  
GATTAGTCGTGCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTTCCTGACCTCCATCCAGATC  
ATTACGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAG  
TCTACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTG  
TGAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCAT  
CTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCT  
AATTCTTTTTCGCTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATT  
GTACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGG  
CTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCCCGCTGATGGTC  
CATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCC  
GTTCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCAT  
ATCGAATATCCCTGCCTTAGCACAATTGCTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATG  
ATGCTTTNAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCT  
GCAGTGGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACGGCGCTTATTCCGTGCTACCTTACTACAAC  
ATCACCATGAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATAC  
ATGGGGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTTATAGGATTGACCGCTA  
TTAAGCTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGG  
AACAGGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCCGAGCTAA  
AGAAACGGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTATGTCGCCATGGGGCGGCTAGTCGA  
CTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACA  
ACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCA  
CGTCACCTCACCCCGTCCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGC  
CGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGNTACTCTGTGTACCAGGGGGTTATTTACCATTT  
GTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGT  
GCCCCCTCGCCATGTGCGNTTTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACC  
TACAAAGAAGGAACACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCCTTCTAGTCACTGAGTACG  
ATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTT  
GGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTT  
CAAGGCTTTTTACNTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTC  
TACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCCAGGG  
ATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAG  
AGCGATAGAAGTACGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGG  
TGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCG

GCGGTTTTTGC GCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGC  
CTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTC  
CTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGNCGCGCCCATACGTTCCCGATAT  
TGAGCGCTTAAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCG  
CTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGT  
GGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCC  
AATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATT  
GGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCC  
AGCACATGACATTCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGANCAGG  
TGCGAGTAGTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTC  
ATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCC  
GTA CT CGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAG  
TAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTA CTCAACTCAGCCGAAGACGACG  
GACAGGGTCCC GGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTC  
AGAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCC  
GACGGGTCTTTT GAGTCCGCCCGC GACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCG  
GCAACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTC  
GTT CAGGGTCCGTACAGTTGGNGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCG  
GCCCCAGCAGGATCGGTGTCAGATCGACGTTTATCGTGTGGA AAAAGTAGGGTGCTAAGGGGGTTCCACC  
GCGACAACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTC  
TCGGCGCAGTGCTACATGTCACCATAGGCAACCCGNTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGA  
CAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCG  
GATGAGGTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTAT  
TCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGAT  
CAGTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCC  
CTAGTCTNCGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATAAC  
TACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGGCCT  
TCGTACGGTGTATGTGTA CTGACTGGGCCGCTTATCTGNCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCG  
CAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAG  
ACCAAAAGAGGGCTCGGGTAGAGCGCTNAACTTTGGGTCAGAAGATCGTCGTAACCCCTGT CAGCGCCATAC  
CCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCAAA  
AGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCGAAAGCACGCGTGC GTT  
CGCCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCCACAAATCATGTCCAGTATACCCTCCTTTGTT  
CTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACC  
GGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGAT  
GTCATATAATAAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTAC  
TACCGCTACGTGGCCATTTCCCACTGGCANAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAG  
AGTCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGC  
GATCGGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGT  
CCCGATTCAAAGAACC CGCTATCGGGGACTAGAGAGAAATATATGCCTACGTTNCATGCCTGGCTACGAAT  
GCAGTGCAAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATC  
AATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACG  
CAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGT  
AGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGNATCGCAAATT  
GAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAA

CGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCT  
GGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAAC  
AAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA  
GGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGANCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACC  
CGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCA  
GAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCT  
TTAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGA  
TACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGG  
AATCGCGGGTGATGCCCTGTGGAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGG  
TCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGC  
TGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCG  
ATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGNCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAA  
ACACGGAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAAT  
CAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGG  
GGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCGGCAAGTGAATTAGGAGCGGTTTCC  
TCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGGATGCTCAAGAGACTCCGACTGA  
CAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGT  
GTTACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAG  
AAGGCGACGAAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGAC  
GAATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATG  
GCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCNGCTGCAAGCGCGTTCGTTACGCCA  
GTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAACGGTAGG  
CGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGANCCAAGTACAAACAGCCCTAAGG  
GCCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGA  
GCGAGGGCCAATACCCNAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAAT  
TTTAAAAGCCATTATTTGGTAGTCGCGACAGAGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACA  
GGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCA  
GCAGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGNGAGTTACACCGGGAGGGAATGGAG  
CCCAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCTCCTCATGTAATATTAGTGTGTGTGGCG  
AGACGGCCTTCTTCGGCACCAAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTA  
GGGGCTGGTAAGAACTTTAGGGGAAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGG  
GACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGC  
CGCCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCAC  
GTAGCAGAGCAAGAAGTTGCTTGTAACTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCAC  
AGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAA  
GTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGA  
TTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACG  
AATAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTA  
CCCGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATC  
TCCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAATGACTCAGGATCCGGCAACCGTAA  
TCCCGACAGCGCGCTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGC  
CGAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAG

GGCTTGCCTAGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGACTGATCGAAACGAACGAACTG  
AACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCA  
TGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACT  
GTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTA  
CCATAGACACGCAGACAAAGACACCCCATTGTCGTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGA  
CTCTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAG  
CTACCCCGCTCCAAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGG  
GAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACA  
GCAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAA  
TACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCA  
TGGAAGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGT  
TATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGA  
AGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGA  
CTGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATG  
GGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTC  
CGTCATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTC  
AGTTAGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGC GCGT  
GAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCA  
ATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGG  
GAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCC  
GGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAAC  
GGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCAC  
CCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTA  
GTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGC  
AACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCCGCCGACATGAGACCGGGGAACTGAGATACAAGG  
ATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTG  
ACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGA  
GATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGC  
GCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATC  
GCTGAGGAGTAGGGAATAAGTTTCCGCACTTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACC  
CTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTG  
GTTAAACTACAGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAG  
AGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGA  
GGATCCGCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGGA  
GGATACACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTG  
GACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGG  
GGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAAT  
GAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTACGATAACGGTCTGCGTTGGAGTACTATAGACT  
AGGGCCCAATTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGA  
TAAGAGCCGACACTGGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACA  
GCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGAC  
TCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCAAAA  
TCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACG  
GTTATGATACCTTACCCGGTCAAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTA  
CCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAA

CAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGG  
TACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCAC  
ATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGA  
AGATAACACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCC  
AAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAA  
AAATCTACTCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTA  
CGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGC  
TTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTA  
TAACACCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTG  
CCCGAGAGACCAGCAGGTGCTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAG  
GCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGCTGAGATA  
GGTACAGCGCTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGATAGGTACAGAGTCAC  
CAAGGTTCCGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCA  
TCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTCACGACTTCC  
CTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGG  
GTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGA  
GGCAGCAATTTGGCTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAG  
CTACGCTGTATCCGAATACGACCTTACACGGTCCGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCT  
GCGAACNAAGTAGACGGCTCACTATTGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGC  
TGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAG  
AGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACC  
GTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAA  
AGTTTTCTGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCC  
GAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGC  
GAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTAGCCCGTTAAAATTAAGTGCGGCTCGGGGTCCCG  
ACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATC  
GGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAAGCATCGTG  
CTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P2, London\_28, IMP, 06.05

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTNTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCNTGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCNCCCCCAGTTTTGCGCCTTACCGAGNTT  
ATCTTAGNCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGCGCGCTTGTCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCG  
NTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC

TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCNCACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGC  
CCNATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCCGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGA  
CACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCNTATTGGTGCA  
TTGGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCTGCCAAAGCGTTTAGCCAAACAAAT  
GTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCANTC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCTCGCGCTACCAACCGCCCCAATTCTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAAT  
TGTTTTACCACTTACTCAACTTTNANTTTTACAGTAAGGCACCGACAGCTTTATAGCCCCGCNCTGCTGTCCTGGA  
TCTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTATGGGTAGGGTGTGACACATACCAATAG  
CCCCACGTTGGTGGCGAGTCGANNTCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACC  
CAGCCGATCTGGATCTCCNTTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGT  
TAACCTAACTTTGGACCCGCGGTAACATGAACGCGTTTCNCTAGACGTTTAGTTTAACTTCCCCTGCTGCG  
AGCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACA  
GGACTATTTGTGGACATTGCNNCTCTGCGTTNCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCG  
GTTGCTCGTACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTGGGNCCGCTATAGGCGCGCTAAGGCTC  
GACCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCG  
CNATCCTCGATACGCAATGTAGGTGCAACATTCCGTANTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATC  
GCCACGAGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGTTTG  
CCTTTGNGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTAGGCGGGTGGTGGAGTTCCCGTCCGT  
GACTCACGAACATTTTTTCCGCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTT  
TGTAGTGTATCACGCCTCGCCATGGACTAATTCGTAATTCATCCGACCGTTCCGGGGACACCTCATGTTCC  
TGCNATATGATCTCCCGCATATTAACACTCCTCAGCTCGCNAACACTGTGGCACAGTCCGTGAGCTAGTATCC  
CGGTGACGATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTC  
GGAGGAGTGGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTNTCATCAATGCGGACTGACTCCA  
CGCTCCTCCTCGCAGGTAATCNCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACG  
GAGGTACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCNACCTGCAAATATGCCTTTCAGTAGCCCC  
NAGCTCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAA  
AGAGTTAGCNTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGNCGTACGATTGTTAAGATA  
TCCATTACGCGCNGTNNNNCACTACAGGATACGGGTCTTCCAGGTGTGNGGGTACATTATTGAGTGNAATG  
CTGACCACCGACCTACCGCACAGGGGACTNTTCAAGTCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTCT  
ACTTTTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTT  
TGCTAACTATAAAGGTGCGTGTTCCGGGAGGATTAGATACAGTCCCTCTTGAGCCCCTATCCTTTCCGCATAC  
CAAACAGATTAGTACCATTCTGATCGACAGAGACCGACNCCAAATCCAACATCAAGTACTATTCTCCTGGTT  
CGCATCCTGTTTCCGTTCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATNCTATAACGCACGTA  
ATCGGGATGGGTCTTGCCTTCGTCCCGATAGCNTAAATTTCTTGAGGCCCCNGGCACTGCCTACAGATTACT  
AATGATGGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGC  
CCNNTTTGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCNAGGCCCACTGCATCC  
ACTATCGCTTTTACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCG  
TTTCCGGGGCTATCCCTAATAGATGTAAGTACTGATCAGAGTCTTCTGCTGGTGTCCAANCTCATGCACTATGTC  
GTCAGATGTTAGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAACTCTGCGTATCCTCCAAG  
GCGTTTCCGGTGGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTC  
TAGGCGCGGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGAT

GCGGGGTGCGACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTCCATCACGATTGGTCA  
CTCGCATCGTTCGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTC  
CGCCTTGGCGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCNCTNCCTCGCGACAACA  
CACACTCCGGCGCTCATTGCGGCGTGGCCCTATGGNTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGA  
TTTGTACCCAACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTAATCNTGAGGGCTGAGCAGCTGTGCGCCAG  
AGTTTGTACTGGTGAAGTCGTTTCGATCATCNCTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACT  
ATTGAGTGTATCCTTAATCGTCACGCCGATGGTCTGTAAAACACTATCGGGACCACCCGCCGCATCTTATCGATA  
CCCGCACTGACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTC  
CCTACGNTAACGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGAC  
GATACCATATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAA  
TGAAAGGCATTCTGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGC  
CTGCATAGCTAGTATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTCTGTTCACACTGTGCCCACTGACGT  
TTTACGACGGTTGTGACTCGTGGATGCCTATCGCTTTTTCTTNATAAGTAAACATANGATTGTCAATGGAGG  
GGGTGNNAGCGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTNGTGCTGCGGCCTCCCCCAATAT  
CTTCTCCATTGACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGATCCCGGCCCTCACTCATGTACGCG  
CTCTCTTGCTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTA  
CAGATCCGTTATGTCGAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGA  
CGTTACCCCCCGCGTCCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCC  
TTTACTATGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCT  
GTGCCCTTCTTTCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAA  
TGTCGGTTTTCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGANCG  
GGTCAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGAC  
AAAATTACCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTNNGTTCTGTC  
CCAGACTAGGTTAGGAACNTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTNNCAACTATTGTA  
ATAGCGAGCACATTAACCGCTGGGTAAGGCGCAACTTGCGGAAAGTGTGTTGCGGGCGCTCGACACCGGCCG  
GGGGACTTTATACGCGCCCCGCTNGGCCGTCGCCGGAGAGCGGATAGCTCCTCATAACCCCTGCAGCCACG  
CGGCGGTCACTACGCCTCCCCTTTCAGACCCTCTGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCC  
GACGTACCTTACCCACCTAAGGCCATANCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCNCGAAGTCTCG  
CTTCCGGGATCCCCGCNCCGCCACGTGTGGGATCCACNGAAACGTAGGCGTGTCTGCGCGCCTTGGCCAC  
CTGGACTTGAGTACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTNTGACCCACACAGGG  
GAAGTCNTCCTCCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTGCATCAGGCTCGCCGGC  
TCTGCCAGNNACGTTGGTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCC  
GGTCATCATGTCCTCTCGACCCCCGNTTCTAGACGATAGGNTATTCTAAGAATCAGCGGTGGCCCTCCATCA  
CGGCCACCNATCGAGTGTGAGCCGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGC  
GGAACCAATTTGTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGC  
TTGTAGACGGGTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAANACCGGTNTTCNG  
ATGACTCGTTTGACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGNCTCCTATGCTACATCGTTN  
GTAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCC  
ATCCAGCTGGGATTANTCGTGCCCGTGAAGCTTCTTTNCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTC  
CATCCAGATCATTACGCCGATACCTTGAGTGGGANTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATA  
CGGTCCGCACTACNCCAGNGTATTTGGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCCA  
AGCGCCTGTGTGAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGNCGTTCAGCNGGCACTACTAATGGTACC  
AGTCCCCGATCTAGCTGGGTAGTGTACTCGNCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGC  
TAAAGCTTTCTAATTCTTTTTGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCNGGCATGCCCCAGCG  
GCGTGTATTTGACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGC

GGCGCTAGTGGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGNCCC GGCCATCGCTGGAGCCGC  
CCGCTGATGGTCCATCCGCNTGCTCATGCCNTT NATATTAAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTT  
ACTACAACAATNCNTTCCGNNCTGCTCCTCTAGTCTGCGTCTGTGNATCCTTATGCACAGTATAAACGGCTG  
NCTCAAGGTAGCATATCGAATANCCCTNCCTTAGCACAAATTCGTAGCATCATGACNTCTACCCTCATTAAGTGT  
TCCGAACATCCAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACNGCCTATC  
GCTCGATGACACTCGCAGTGGACGTGCCCTT GCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCT  
ACCTTACTCACNACATCACCATGAGGATCTGTTATT CNGGCNGGTCTCTGTTAGGCTGTTGGGAGTGC GTGATA  
TCTGTTAGCAATACATGGGGAGAATCTTTGGTACNTTACGTATTCTGCTNTTAGAAATTTTACAGCGGTT CAT  
AGGANTGACCGCTATTAAGCTTCCNTCATAACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCNCT  
GATTGTGGCTCGGGAACAGGTCAAGCTNTNAGGTAGTTGGCTAAGAATTGGATNGAGGTTCCGGCCTGGTGC  
TCTTCGCCGAGCTAAAGAANCCGNGNGNGNAAAATATTGCTTNGTATGTNACTGCGGGTGATGNCGNCCA  
TGGGGCGGNTAGTCGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAG  
GANGACCTCCCATTACAANAACGGTCCCGGAAACCTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGG  
CCTACCAAGCGTTGGCACGTCACCTCACCCCGGTGCGGCTTACGGCGATCGTCTACTGCCAGNTGCCGGTAC  
CGGCGGGGACACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGNTTTTGGTGCTACACTCTGTGTACCA  
GGGGGTTATTTACCATTTGTCCAATCACATTCGCTGGCCCCCATNTATCGGCAGTTGGTCCCAGGGGGCCTC  
CCATGATTACGTGTACGTGCCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTNGGCCATCTTCTATATCC  
AGCCTAGANCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACC  
CTTCTAGTCACTGAGTACGATATTTGGATAGTTCATAGGCATGTATAANCTACGCACCCGAGTTAGCAACTCCT  
CAACCTTCTCCCCGCTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTG  
CAGCATACGATAATCTTTTCAAGGCTTTTTACTTGGACTCCCTANTGTGTCACTGCGGGCCCTTCTTATGGCTCC  
GGTCTGAGCGCGCTGTCTACATCCATNGCGGTCCCTATACCTTAGTCGGATCCTGTTGCGTGGCCTATACAGAA  
AGCTGGGGGCACCAGGGATTGCACGGCAGCGCGAGGNGATGTCCAGGGGCATGGAGATTATCCCTATCAGT  
GGGACATGGGANCGAAGAGCGATAGA AACTGAGCGCGAATTACAATACGTCTCTCACGTGTAACCTATAA  
GTCAGGCTTTGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCT  
ACGTTGCGCTGGCCGCCGGCGGTTTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCAT  
GATGGGGAAAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAGTG  
CCCTGTGAGCACTTCTCTCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCG  
CCCATACGTTCCCGATATTGAGCGCNTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAAC  
GCATCCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCNTTTCAGC  
GTGCTGGCTAGTAAAGTGGCCTGCGAACGTCAGATGGGCNGGCCACTGCAACTAATGTCCNAATCCTGACGG  
TNN  
NN  
NN  
GTTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCCGCCACAAGCTCTGCCACTCGCGTG  
GTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCGGTTTCGNATATGTTAACTTTGGAGC  
ATGCTTTATTCGCACTCGGGTTGGGGATCTTNCCTATACTCAATCTGAANCTTCTCTAAGCGAGGATTACAGCG  
CTAGTGTNTAATCACCTCCACGTTCTGCCTCGCTCCGTA CTGTAATATGAACAGCCGGCGTGCTCCGNAAAG  
NTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTG  
TCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTC  
GTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTGGCGCCCACTGAAGCCCCAAGG  
TGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCCTTTTGAGTCCGCCCGGACACCGTGCGG  
NGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCA  
TTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTACAATTGGCGATCTCATCTGTGCG  
GAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCGGTGTGAGATCGACGTTTATCG  
TGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGGACAACGAGGCGACTGTGTCGCAGTAGATCANGC



AGNTGTNGNAGTGCTAGGTNCCACGCCCAAGGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGC  
TTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGNTCGAACTCAGACTCGGACGCAAGCACAAG  
GTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGNGACCAACGCCCCGACAGTAATTT  
CCATAGGCAAANCCTCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCG  
TGTCAAAAGACAGCGACAGACAGGNGCNGGATGATCAGTAGCTACCGGGTACGCCTCTCAGACNATGGGGG  
GGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCNACTGAAAGCGGGTGTGCAACGTA  
NAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACACTACCCCAACATAGCATGGTAAGCACTCAAATCCATT  
GCCATTCGAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGTGTACTGGGCCGCTTNTCTGNG  
CGNCTANGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGA  
GGGGTCCGCAGTCGGGCCGTANTACCAACGACGCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTT  
GGGTCAGAAGATCGTCNTAACCCCTGTCAGTGCCATACCCNAAAGAGTTCAATGACCCATGTAGACAAGTG  
GCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTG  
AACCAACTTCACTGGGAACCAGAAAGCACGCGTTCGTCGCTGACTATCGACCCGCGTGCTANCAANCAA  
GCATCCCGACNAATCATGTCCAGTATACCCGCTTTGTTCTCTGGGTTGTGCGCTTGGTTCGTAGGACGATG  
TCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACACACGGACTCCAC  
GCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAACGAGACCGGGCCCTACAGTT  
GTCGTGAAATGGACTTATACTCGACCACGNTGCGAGTACTACCGCTACGTGGCCATTTCCACTGGCACAGG  
CAGCGCCTGGGGGTAGTGGCACGAACGTTTACGNAAGAGTCCCGTCTAAGGCCTTCAAGTTGACCGGTCA  
AAGGTCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCNGAGTCCCTTCAGACGGCTCTTCGAGACT  
ATCCCAAAGCCTCTCTGGGGANAGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAG  
AGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGGCCGGACG  
GAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAA  
TTACGAACATCNGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCGCACATGGCCGACTTC  
ACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAA  
AGCTGTNCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCA  
AGTGACGTCATACCTACCAAGCGGTCCCAAGTAGNCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAG  
CCAANTGGNGCTTCGGACATTGANGTGGCTGTTACAGCCTGGCCGTATACACTTAAGTTCAGATCGNGACCA  
AGAGCCCGGTACATCCCCCGATGCCGAACCCAATCCAATAAATTTAACGCCACGAACCGCTTCACAAAAT  
GGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGNAAGGAGCCGTAANTANCCAACAGTAGAAAAACG  
ACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTNCGCCGACCAATTGCCTTCGC  
GAGCGCCGACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATNAACGACGAGACCCCGTGAACCTTCGGT  
AGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTGCAGANGAGATNATCC  
CTGTATTAGTGAAGTAATTGGTGCATTAATACACCGCCGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAA  
GTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACACCTCTCGAAAATAGTGAGGT  
ACGCGGGGAGATGTCTCAAGTCCGGGGGGNNTCTTAGGANTCGCGGGTGTATGCCCTGTAAAGGGAGATG  
AGGAANNAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAG  
ATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAG  
GCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGCGGAGAGGGACTTCTGCTC  
CGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCTCTG  
GGTAAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCG  
AGGTTCGGTGTGGACATAGNTTAACACAGTGCCGCCAGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGA  
TCGGAGGAATTTCCGGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGAGNGGTAGCG  
GACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGT  
ACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTNACGGTGGTGGCCAGCTGAGGTTTCGCGAT  
GTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCNACGAAAAGAAACCAGACCCCCAGTG

ACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTTCGTTACAGCAGGGGGGC  
ACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCGAACCG  
CATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTCGT  
ATCATGCCGTNGGCCAACAAAGNGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGT  
GNTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGC  
CCTTGGAATCGAAAGAAGGGAGTGGGGAGTATAGTNAGAAACCTATGTCANGGACGGGGTAGACCANGCA  
AGCTCCCTAGGAAGCGAGCCAAGTACAANCAGCCCTAAGGGCCAAGCTGCCGGATTGCCGCTGCTAGGCGTA  
AGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAA  
GCGCGTACGGNTCAGTGAAATCAATACCCCTAAGACCAATTTAAAAGCCATTATTTGGTAGTCGCGACAGAG  
GAACTGTCTGGACCGACANTGTGGCGAAAAGGCAACAACAGGAAAANNTGGCGAAAAGGCGGTACAAAATTT  
GCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGNAATGAAGGCNCAGAATAGTGTT  
ACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGANCATGGCTATTATGAGGGATCCGCTCT  
CATTTGGGACCCTCCTCATNTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATCAGAATTATTTGTTG  
TCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTANCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAG  
TAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGNGCTGCGCAATTGC  
GGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCCGTATGAGAGCCCACGGGGGAATCCTCGC  
CTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTNGCTTGTAAACGACTN  
GCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATNGAAGGG  
CGAGAGAAAGCGCAGACGGTACGTCTGNNGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTG  
CCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCA  
AGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGAGAT  
GGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACNTTAATAGGCGGAGGTCCTG  
CCTACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGGCTNAAAGAGTGAT  
CAGAGCGCAACAAACGACTCAGGATCCGGCAACCGTAATCCCGACAGCGGCGTCAGTTGGGGAACAGCG  
TCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCNGCCGAAGTACTATCATGCGAGGGGGAGGCNAT  
CGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCNCNCCTAGCATTGATTTTCTTTGCTT  
AGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTGGACAAGANAGATNTGCGGACGAGA  
CGAGAAGCGCTTCGCGNNGCAAATTCGGCGAAAGGCGGTATGATAGTATATGGGGCGGGGTGAGGGAAA  
ATGTAGCAGGNTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGCTCATTGGGACA  
AATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCAT  
GTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCNATGGCTGCACATGNAT  
AATTCGAAAGAACGTAGTTCCAGNGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCACCACGTTTG  
GTGCTGAGGTATCAAATGCTTCCACGGACGATTAGAAGTTTGGGAGGAGCTCTTGGCATTTC AAGCTATCTT  
ATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGTGGCATTAAA  
AAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAGAGCAGCGA  
GTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCANGGAAGATTGTCACCATAAGCAGGGNN  
CTTGTGGTGTAGNTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGGGGGAAAGT  
TTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGNAGACTGCTTAATCTGATG  
TGCGAACAGACCCGTGACCGTGCCGAGGGTNGCACGAAGGAAGACTGGGAGAAGTACGCTATCAGGAACT  
ATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATTGGACTCAACGCAAGCATCAAGGACCTG  
GCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAA  
TTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCC  
ATACCCTAGTGANCAGCAGATGACGTGTGNGTAGCCCTGCGCGTGAAAAGTGCATANCTATTTAGAATCCCT  
AGCCACANNTCTCGTCTTGCNGACTCATCTGGCACCTCTAGCCCCAATGGCGNTGTGGCGAGTCCAGTAGTCT  
CCACCAGTCTAANGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGG

AGTGCTTTTGAAGNNCANAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTAGCGACGCCCCGG  
AGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCCCTATTCTAGATGTAAAGGTCT  
GGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGC  
CCCGAGCGGTCTAGTTGTGACGGGGAGNCGACGCTTAGATGTAGTAGGCAGCCCTCCCATTTGTGANAACG  
CTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACNNGGCATAGGAGCATATGCCAAG  
TCAAGGTCTCTGCCGACATGAGACCGGGGAACNGANATAACAAGGATCGTATGGACCCTCAAGCCCAGTCTAA  
TCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGNACTGGAT  
GGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATANNGTAGGGCCGTCTAGCCCTTAC  
TCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCCNAGGAAATTTNCTCGGGCGG  
TTACCTAAGGCTGACACTCGCGNAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGCCG  
CATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAANNTGACGAGGTGAAGCG  
CAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGN  
TCGCAGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCTGGTTGGAGC  
TCTTGCTATACTGACAANTGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGAAAAGCGATA  
CCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGANNACAGGTCCGAAGGACGAACAGC  
TGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTNGACTATACCATTGATCGCAAATACAAGCA  
ATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACAGGGGAAAGGTCCGAGGCGGTCCAAACGTCT  
CCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGANACAGTAGGCA  
ATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTA  
AAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTG  
ATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACGGCTATTTTTCATGAAGCCACTCAATAGCGG  
GCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGCATATTCTGAAGCCTATACGG  
ATAGATNCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGG  
GNATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGAC  
AGACCTCAGACAACGTCTAACACGACCCCACTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATC  
GAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCT  
GTGTGAGGAACGCATAGTCGTGCAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGG  
TGCGCCAGAACCCTGAGNNAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTT  
GGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCNGAAGATACCACGCAAGGAACCCCTCTCTCGA  
ATTGGATTAGGGCNCSCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAA  
GGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGANAAATCTACTCCGACGGGGGGATCCCCTCA  
AATCCGCACGCAGGTTACCCCCGCNCGCCGCACTTTTGTATTACGATCTTTCTGCCTGGATGCGAGACCGAT  
AGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGG  
CCGACGTTTCATGGTAGGACGANATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTGCGCTC  
CGCAGGGCCCGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGANAGACCAGCAGGTGCTCGATTGC  
GGACTCGTTTAGGAGGATGATGANAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTCATGTAAAG  
AAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCC  
GTGAGACGTGTGATCTACCTAGTGNCTTGTAGGGTACAGAGTCACCAAGGNTCGGATCAGGCAACCAGGTCA  
AAAGACGTCTACGGGCGCCATGGGTAAGCGGTAANCCGTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGC  
CGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATNGCGA  
CCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTA  
TACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCNGAGGAGGCAGCAATTTGGCTTCAAAGACGAT  
ACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTANCNNAATACGANCTTA  
CACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATT  
CGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGNCTTTGGGCTGCTCTGGACTAAGNGCAAAGGGAAT

GGACCCGTACGATTTGTGTGGAGGTGCTCTCNAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTA  
CTATACGGACGAGACACAATTCTCCCTTCTACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCA  
GTGCAGGAGGTGTCTAGTCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGACAAAGAGCGGGCA  
GTGCATATCCGTCCCCAACAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGGGGTGCGA  
GGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGANNCACGCAGCTGCAGGTGGGGGA  
CGAGCGGATTAGCCCGTTAAAATTAAGTGCGGGCTCGGGGTCCCGACGCATGGTATGTATTTTCATCGAGGT  
GACAAACGGTGAAATGGGTTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACGTCCGGATG  
TACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGATACCCGC  
AAAGAGTGCATAAAG

>E3, London\_9, VIM, 02.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCCGCTACCAGACTTCACATGGTTGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGN  
GANACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCCNNTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTTACCAGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTNCAACNGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
NTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTNCTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGTGTGTCTGGATCTTT  
AGATCGCTTATCGGGGCACGCANACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGAGTCGACATCNTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCGGCCCCCTCCANATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCNNTCTGCNNTTCGCTCACCTTGTGCTATGCCATNTTCTCCATGCNCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTTAAAGGAGGGGTTGGGCCGCTATAGGCGCGCTAAGGNTCGACCAG  
CCGCTTNTCCTCCNGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCNATCC

TCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCCGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGNAAGCCCCGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCGTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGACTAGGGCGCCCACTCCCGACTCTGGGACGNCTCATCAATGCGGACTGACTCCACGCTCCT  
CCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTA  
CCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCNACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCC  
CTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTA  
GCNTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGGGCCCTATCCTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTCTNGTAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTNGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTANATTATCACCTCTTCAGGTTCTTCGTGCCGNNTTGG  
TTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGNNAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTTCGTTACACTATTGNGTTGGCGCGCAGCTTACCTGGCTGCTCTCGTTTCCGGGGC  
TGCCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAACTGGCAATAAGATTAACGATCTTCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAAGTGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGNCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTGGTTCGATCATCACTTGTAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGA  
TCCTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATAACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATNCCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTNTTGTAAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCT  
AGTATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAG  
CGNTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATT  
GACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTT  
ATGTNGAAATCCCATAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGGGCTCACGACGCTTACCC  
CCCGCGCTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGA  
GTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCT

CTTCCACATCCCCAGATTACCCNANTTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTC  
CTTACNCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGAGATCCAAATATGCGGGTACCTTTACGCCGTTNNGNTCGTCCCCAGACTAG  
GTTAGGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCTGCTCCCTGCCAACTATTGTAATGGCGANC  
ACATTAACCGCTGGGTAAGGCGCAACTTGCNGAAGTGTGTTGCGGNGCTCGACACCGGCCGGGGGACTT  
TATACGCGCCCCGCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTC  
ACTACGCTCCCCTTCAGACCCTCTCGTAAATGCTGGGAGTCNCCTTTGACNCCGAGGGGTCCCAGCTAC  
CTTACCCACCTTAAGNCCATANCTGTGCGCNNTAAATCCGGGTNNNTGTCCCCCNCCGANGTCTCGCNNNN  
GGGATNNNNNGCANCNNNNNGTGTGGGATNNANCGAAANNNNGGCGTGTCTGCGCGCNTTGGCCACNT  
GGACTTGNGTACGNCCTNGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGG  
AAGTCTCCTCCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTC  
TGCCAGCACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCG  
TCATCATGTCCTCTCGACCCCCGGCTTCTAGACGANNGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACG  
GCCACCATCGAGTGTACGCCGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGG  
AACCAATTTTGTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTT  
GTAGACGGGTAACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATG  
ACTCGTTTACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATNNNTGGTA  
GATAACGAGTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATC  
CAGCTGGGATTANTCGTGNCCGTGAGGCTTCTNTCCCGCCAGTGTGGCCAGGGTGTGGTTCTGACCTCCA  
TCCAGATCATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACA  
GTCCGAGTCTACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAG  
CGCTGTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGNNGTTCAGCGGGCACTACTAATGGTACCAG  
TCCCCGATCTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTA  
AAGCTTTCTAATTCTTTTTGCTGGAAGACCATAACGAGTCCATCGCGGTGGCTGGCATGCCCCAGCGGC  
GTGTTATTTGACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCTGGATTGGGCGG  
CGCTAGTGGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGNCGCCC  
GCTGATGGTCCATCCGCGNGCTCATGCCTTTCATATTAGTGCAGTCAGGCTCTACTGGCAGCGATTTCTTTAC  
TACAACAATCCGTTCCGCTCTGCNNNTCTNGTCTGCGTCTGTGGATCCTTATGCACAGTATAACGGCTGACT  
CAAGGTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCANGACTTCTACCCTCATTAAGTGTCC  
GAACATCCAATGATGCTTTCAGGTCACTACGCGCTCCGNGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCT  
CGATGACACTCGCAGTGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACC  
TACTCACAACATCACCATGAGGATCTGTTATTCGGGCGGTCNTGTTAGGCTGTTGGGAGTGCATGATATCT  
GTTAGCAATACATGGGAGAACTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGG  
ATTGACCGNTATTAAGCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGAN  
TGTGGCTCGGGAACAGGTCAAGCTGTGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGTCTT  
CGCCGAGCTAAAGAAACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTATGTCGCCATGGGG  
CGGCTAGTCGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGA  
CCTCCATTACAACAACGGTCCCGNAAACCTTGTGGTAGTNGGAGAAGCATGCGGGTGGACCGGCCTACC  
AAGCGTTGGCACGTACCTCACCCCGTGGCGTCTACGGCGATCGTCTACTGCCAGGTGNCGGTACCGGCG  
GGGACACTCTGCCGAGTTGCTAAACTNCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGG  
TTATTTACATTTGTCCAATCACATTCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATG  
ATTACGTGTACGTGCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCT  
AGACCCGAACACCTACAAGAAGGAACCACCGCAAGTTGCGTGACGGTGGTGTGCTCCCTCAGTACCCCTTA  
GTCACTGAGTACGATATTTGGATAGTTCATAGGCATGTATANCTACGCACCCGAGTTAGCAACTCCTCAACT

TCTCCCGCTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCAT  
ACGATAATCTTTTCAAGGCTTTTTACTTGGACTCCCTATNGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCT  
GAGCGCGCTGTCTACATCCATGGNGGTCCTATACTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTG  
GGGGCACCAGGGATTGCACGGCAGCGGAGGTGATGTCCGGGGCATGGAGATTATCCCTATCAGTGGGAN  
ATGGGATCGAAGNGCGATANAACCTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAG  
GCTTTGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGGTAGCGAGATCGCATCAGGCCTGTCCCTACGTT  
GCGCTGGCCGCCGGCGGTTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGG  
GGAAAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGTCCCGT  
GAGCACTTCTCTCTGAGTAGAGCCCATCAGTCCGATCACGTGCNGATCTGAATCTTGGCTAGACGCGCCCAT  
ACGTTCCCGATATTGAGCGCTTAATCTATTCCCACCTTGGCGTGCATGCTGTCCATATGCCACCAAACGCATC  
CAGGGTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCT  
GGCTAGTAAAGTGGCCTGCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGG  
CTTCTCAGAGCCCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGC  
TCCATTTGGCATTGGGTGGTACGAAACCGCACTNGGCAAGCGCAGNTCTCTTGTACGGCTGGGAAGGTTGC  
AAGAGACAGTTCAGCACATGACATTCCGCCACAAGCTCNGCCACTCGCGTGGTAAAGTAGGGGGACAGCCG  
AGAAAGACCAGGTGCGAGTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTT  
GGGGATCTTCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACG  
TTCTGCCTCGCTCCGACTCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTA  
TTCGCCGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTANNCGTCTGTCTACTATCCTGTACTCAACTCA  
GCCGAAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATC  
ACCGTATGGGGTCAGAACGCCGATAGTGGCGCCCACTGAAGNCCCAAGGTNCTTTGATAATTCGGGACCGG  
GGTATCAACAGCCGACGGGTCTTTTGGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGG  
TCTAAAAGGCTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTC  
AATGGGCTCTCTCGTTCAGGGCTCCGTACAATTGGNGATCNCATCTGTCCGAGGGGTTGAGGATTACTGAGC  
GCGGAGCCAGCGGCCCGACGACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTA  
GGGGGGTTCCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCA  
CGCCCCAAGGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAA  
GGGCGACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCNCAGGTGTAGGGATTACATCTCGCTCG  
GGGGGCAAGTCGGATGAGGTTGCCGAGACCAACGCCGACANTAATTTCCATNGGCANNCCCTCTCTTGA  
ATCTGTACCGCTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACA  
GGAGNTGGATGATCAGTAGCTACNGGGTACGCCTCTCAGACNATGGGGGGGTAGGGGGCTATTAGATGAG  
GCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGC  
GTCGTCTATNNACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTA  
GGGGGCTAGGCCTNCGTACGGTGTATGTGTATTGGGCCGCTNATCTGGGCGACTNGNANNGCCAGAACCCC  
CTAGTACGTGGGNGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTA  
TTACCAACGACGCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATNGTCGTAACCC  
CTGTCAGCGCCANACCCNCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGNGTC  
GTGTACGATTACNAAGANCCCTACCCACATNGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGA  
AAGCACGCGCGTTCGCNCTGACTATCGACCCGCGTGTACCAAGCAAGCATCCCCGACNNNTCATGTCCAG  
TATACCCTCTTTGTTCTCTCTGGGTTGTGCGNTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATC  
TCGAANCCAGGCNACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCG  
CGACCTACTNGNCCGATGTCATATAANAAAACGAGACCGGGCNCTACAGTTGTCGTNAAATGGACTTATACT  
CGACCACGCTGCGAGTACTACCGTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGC  
ACGAACGTTCTACGAAAGAGTCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACT  
ANAGNACCATGCAAGGCGATCGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGA

TAGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTT  
ACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGAC  
AGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGA  
NCCTAATTAAGGCGAACGCAGGTATCGTTCCTNTCGACATGGCCGACTTCACCATTATGTCACAAGGAGGA  
TGTCAGACCCCGAGGTGTAGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGNAAACACN  
GTCTTAAGAATCGNAAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAANTGTACGTCNTACCTACCAA  
GCGTCCCAAGTAGCCTAACGGCGGGGATAATAGNTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATT  
GATGTGGCTGTTACAGCCNNGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGTACGTCCCCCGA  
TGCCGAACCCAATCCAACTAAATATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCT  
TGAGCGTACCCCAAGGGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAA  
TCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGC  
GCATTAGAGCATGTGGACCCGAATGAACGACGAGACCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGT  
GGCGCCATCTGTCCGACCANAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTANTAGTGAAGTAATTGG  
TCGATTAATACACCCGCGCTTAAAGTCAGCGGACCAAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAA  
TGACAACGCCAGAGCTGGATACGAAGTAACGGCNCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAG  
TCCGGGGGGGCGTCTTAGGAANC GCGGGTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGG  
CTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGC  
TAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTAC  
CAATCGGCCCTATCCTACCGATGAGGAGTGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCC  
GAGGCGAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCG  
GCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGGACATAGA  
TTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTGACCTACAGCGAGAANATCGGAGGAATTTCCCGGCAAG  
TGAATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATG  
CTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAG  
TTGGCGAGGACCTTGTGTGTTACGGTGGTGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACC  
GCTCTGGACTGACCAAGAAGGCGACGAAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCC  
ATTAATGAAATACGGACGAATCCGATGCCGTTCTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGC  
CATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCNGCCCAACCGCATCCGGGGAGGCCGCTGCAAG  
CGCGTTCGTTACAGCAGTGAATACCTGCAGACGGATTGCGCACGCTTGTATCATGCCGTCCGGCCAACAAGCG  
GAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTG  
ACGAGAATATGGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGT  
GGGGAGTATAGTAAGAAACCTATGTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGT  
ACAAACAGCCCTAAGGGCCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAAC  
GTTGCAAGGGACCTGAGCGAGGGCCAATACCCNAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCA  
ATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGTANTCGCGACAGAGGAACTGTCTGGACCGACAGTGTG  
GCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGT  
GTAACGAAAAGTATCAGCAGGCAAGAAATGAAGGCGCNGANTAGTGTACAGGCCAGAAAGCGAGTTACAC  
CGGGAGGGAATGGAGCCCAGANCATGGCTATTATGAGGGATCCGCTCTCNNTTGGGACCCTCCTCATGTAAT  
ATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATCAGAATATTTGTTGTGCGACGTTAATCAGCCTCGTGA  
AGGCACGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAG  
CATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTNCGGCTAGGAGAACCCTCGTGGACA  
AACGAGGGTACAACGCCCGGTATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTT  
CCATCCCGAACGCCACGTAGCAGAGCAAGAAGTTGCTTGAACGACTTGACCCGATGAGGAGAGTTCAATT  
GACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTNNTAGAAGGGCGAGAGAAAGCGCAGACGGTAC  
GTCTGGCGNGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATT



GTCGCGACGCATTTAGATTTGCNGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGNGTCGTTAAAGTGT  
TCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGAC  
CTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATAGGCGGAGGTCTGCCACTACTTAACGCAGGATACG  
ATTGGAGGGCGGAAATCTCCCGTTATAAAATCCANGCTGAAAGAGTGATCAGAGCGCGAACAACGACTCAG  
GATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATNCTGCCCCATA  
CGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGA  
GAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATC  
GAAACGAACGAACTGAACGTGGACAAGAGAGATATGCNGACGAGACGAGAAGCGCTTCGCGTTGCAAATT  
CGGCGAAAGGCGGTCATGATAGTATATGGGGCGGNTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTT  
GCCCTTAGGCCGTGACTGTGNTGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTGAG  
GTTGCTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTA  
TGGTGCATACGCAGTACTCTCAGATTCCAATNGCTGCACATGTATAATTGAAAGAACGTAGTTCCAGGGA  
AACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGT  
ACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCAT  
ACGGATGGTGTCTNACAGCAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCNCNCCGGGTGGGCGGAGA  
AAGAGTGAAAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACG  
CAAGGACCACGGGGGCATGGAAGATTGTCNCCATAAGCAGGGNACNNGTGGTGTAGGTAGCGAGGNNNC  
AAAGGAGGGACCCGAGTTATCATCTACCCCGCAGGGGGGAAAGTTTCNAGAATCAAGGTATGAGGATAAA  
CACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGA  
GGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCT  
AAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGA  
GTGAGCCCATGNGTAGCTCCGTGATAACCCCTTCGAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTT  
GATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGT  
GTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTC  
ATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGC  
AATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAA  
GGATATGTATGCCACTCCCCGGATGAGAGCCTCTGACGACGCCCCGGAGGAAACTATGTACGATAACAGCAC  
CCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGGAAGATTG  
CACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGTCTAGTTGTGACGGG  
GAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTC  
CAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCG  
GGAACTGAGATAAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACA  
GTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCG  
ACGTACACTGTACGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCANGGCCAACAGTTCCTCCCGTACGA  
GGCTAATCGCACCCCTGCGCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAA  
GATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCG  
GTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAA  
AAGGTGATGGTACCTGGTTAACTACAGGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGT  
AAAAACCCAGGCAAAGAGAAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTT  
TGAAAGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCA  
GATTCTAAGTGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCA  
ATGACCAATCTAGCTGGACTATACCATTGATCGAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACG  
ATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATC  
CTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGT  
TGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGAT

TGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATT  
TAAGAACTGATTACAGCTATTTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTAT  
GGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGA  
CCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCA  
GAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGAC  
CCCAGTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAA  
GGAGCTGAACCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACC  
CCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGNNNNGTGCC  
AGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAG  
TGGTCACTCTAGCTGAAGATACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGAC  
ACTACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGT  
GGGACGGAACGAAAAATCTACTCCGACGGGGGATCCCCCAAATCCGCACGCAGGTTACCCCCGCGCGC  
CGCACTCTTGTTATTACGATCTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCA  
GTTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGA  
GGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTGCGCTCCGACGGCCGGTACGGGAAAGAGGGGG  
ACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGANAGGG  
CAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTAC  
GATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGT  
AGGGTACAGAGTACCAAGGNTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAG  
CGGTAATCCNTCAGCATCAAAGCCTTACGTGGGTGCCCGTGCCGCNAAGGTGGGTTGATGTGTCTGGGACT  
CCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAA  
GACGTGGTTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTA  
GCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCA  
AGTAAACAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAG  
GTCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACG  
GCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTC  
TAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTCCAC  
CGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCG  
GGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAA  
ACAAAGTGAGTGCCCGAACCATGCGATCCTTGGNGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGT  
GGCACTGTTAGTATGCGANNACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTG  
GCGGCTCGGGGTCCCACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCAC  
ACCGTGGGACGTTTCATCGGCTACCTAGCTCGTAACGTGGATGTACACAATAGCGAATGGTGGGTCGGTCTCT  
CAGNCGAAGCATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P61, London\_9, VIM-2, 11.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTAAATGN  
GAACACCGACATCATATGCTTCTGGACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCAATAAATCTCCAACGGGCTTGAAGTGAACAG  
AGTGAATCTTCTGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC

GCCCCTACTCGGTCGCCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCGGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTNCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCTGCTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCAGTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCAGTGC  
GATCCATATAATAGCGCTTCTCTGTCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCNATGCGGACTGACTCCACGCTCCT  
CCTCGCAGGTAATCTTTCCGTTAGTAATGGAGTGTCCGGTGCAGTATTAGCACGCTTACTTACGGAGGTA  
CCCGTGTGAGCGTAGGCACGGTTCGTGGCCATCGCAACCTGCAATATGCCTTTAGTAGCCCCCAGCTCC  
CTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCCTTCGTATCGACAGAGACCGACGCCAAATCCANCATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGAGGCCCAAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCCAGGTTCTTCGTGCCCGGTTTGGT

TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTT  
TACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCT  
GTCCTAATAGATGTAATGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCTAGTGTCTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCTCCAAGGCGTTTCGGTG  
GGGCGTGCCTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGCGCT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAGTAGGTGAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTTGTAAAGCTCAATGAAAGGCATTC  
TGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTA AAAACCCTCAGTGAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATTAAACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCC  
CGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGGAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGGGCTCACTAC  
GCCTCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCTTAAATCCGGGATTTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCCACTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCCCTCTCCG  
TACGGGAGAAGAATAATTTTATGTTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTCTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCTTACTCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGNTGGCCAGGGTGTTTTGTTCTGACCTCCATCCAGATCATT

AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTT  
CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTTCCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGNAAACCTTGTGGTAGTCGGGAGAAGCATGCGNGCTGGACCGGCTACCAAGCGTTGGCACGTCA  
CCTCACCCCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACA  
AAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATAT  
TTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGG  
CTCTAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAAGATAATCTTTTCAA  
GGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTAC  
ATCCATGGNGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGCTATACAGAAAGCTGGGGGACCAGGGATT  
GCACGGCAGCGGAGGTGATGTCCGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGC  
GATAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTAATAACCTATAAGTCAGGCTTTGTCACTGGTGA  
ACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCG  
GTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAG  
CCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGTCCCGTGAGCACTTCTCTCTGA  
GTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAG  
CGCTTAACTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGC  
GAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGCC  
TGCGAACGTCAGATGGGCCGCGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATG  
CACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGT  
GGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCA  
CATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA

CGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACG  
GGTCCTTTTGTAGTCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGCTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAGGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACNCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGAAAGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGCTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGCTTCGCCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
CTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGACGGAACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACCGAGGT  
ATCGTTCCCTATCGACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGTCCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG

TCAAAGTACCCGTAGACCAACCGAGGTGGTGGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTGGCCAAACAAGCGGAGCAAAACGGTAGGGCAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGC  
CCACGGGGGAATCCTCGCTGCGTGTGTTGGGGCGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCGAG  
ACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAAGTACTCTCAGATTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGTACGATTACAGAAAGTTTGGGAGGAGCTCTTGGC  
ATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGG  
CCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGA AAAAATGGAATACATTCCGCGGGG  
GGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCAC  
CATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGC  
AGGGGGGAAAAGTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACT  
GCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG

CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GACGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAAGTCTCTGCCGACATGAGACCCGGGAACTGAGATAAAGGATCGTATGGACCCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTC  
GCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGATCCCCTCAAATCCGACGCGAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGACGGGCCGGTACGGGAAGAGGGGGACCAGCAGACGTTTGCCCCGAGAGACCAGCAG  
GTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTGAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTG



GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>reference

CTTTCACCGACTTTCCACGCATGTCCTGTCCCCTCTGACTAACGCCAATTGCGTTCTTCACTGGGCCTTTTTGC  
GTGATTATAAGCGTTGAGTCTGTGCAACCTATTGTTGCCGGGAACAGTCAATCTCCTGACTTCCCCTGCGAGA  
TCAGTGTGTGCTCCGATGACTCAATGTTGGCCTGTCGAGTGCCTCTCTATGGTCCAGCAGGACCAATACGAAG  
GTAAAGCGACGCGGACCCTTCCGCTATTTGACGCTAGGCAATCCGGTCCAGTGTGTGTCGAGAGTCAACCTCC  
GTGGGGCCGGTGGGTGTCATGCCGGCATGTCCTCTATTGTCCTCACTTCTCGTTAGCGTCTCATGGGCTTACTC  
ACTCCTAAAGGCAGTGTGAGTTCAGCCTGTGCGAGGCACCCGACATCGACTTACCCAGAACACCCCGCCACGC  
CCAGTCCCCTTCCATCTCCTTAGGCCCTCGCCTACTCATTCCGTTATTTGTTTGACCATATAGTATCGTTAGAT  
CGGCTCGGCCACCGGTTGGGAATGCATTACACACGACCTGAGTTGCGTGTGCTTGTCTAATATAGGGCCACG  
TGTGAGTGGCCGCTCTAATCCGCCCCACATACCCAACACAACCGCCCGCTCCTCCCCACATATCCACTGT  
GTAATTTTACTCTAGCTATTTTTCTCGGGAACGCGCCACCCCGTCCGTTAGGTGGTGACGATTCAATTATTCCG  
CGGCGAATCATCTTCTCGGCTGGACCTATACAGTCTTATGGGGTGTCTGTTACTCGCTGGCGCGTCAGAGAG  
TACTGAGCAATCTGCCAACCGAACCTCGAACAAGCCACGACATAGCGGCCGACCGCTCCACGCTATGGAACCT  
CACGATTTGGCTTCTCCGGTCTAGCGCCAAACCGGATTTGGAAGACTGATCCACAGTACTGGAAGGCA  
TTTGTTCTGTCGAGGACTGATGCTTAGGTCCGTTAGGCTACTCTCACGCAAGTCTAGCACACTCCGCG  
GACGGACTACGGTACTCCTGAGTCGATCTGTCCCTACTGCTATAGATGAGTCCGTGCCAGTTAACTGTCTTTC  
TGACGCCATTCATCATAAATTCCCAGGACTCTGTGGGGCCGACTACGTCGGCAGACAGTTAGTCGAGGCCGT  
TCGGTTACGCTGTGGTTACATCTCCGTCCAGCGGTAAGTCTTGTCTGTCGCCCCGAGGCGCAACCACCCGCT  
GCATCATCTCAAGACAAACTGGAAACTACTCTTACTAGTGGTATCCGTTGCAGGGTGCAGGCTAGGTAAGTG  
TGCATGCCTCCGACTGGTCCGGTACGCAATCCGGGGCACGAGGCTTATCCCCTTCGCCAGTCTGAGCACATGC  
CACGAGGCACTGAGACGTGTCCTGGGTGAACCGAGTGCCTGATCTTCATGTGGGCAACCCGATTGGGTAGG  
CCCACGCTCGTTTTCAAGAGCCATTAGACCCTTGGCCAGGTAATCTCGCTCCCGTTCTGGCGCCGCTTCC  
ACTTCGCACGTGCAGGCTCTCAGCACCTATTTGCTCTCAATCCAAGTCCGCTCTATTGCACAGTGCAAACCGCT  
TAACTACGTCGCCCTGTGCCGTATGTTTCGACTACTTAAAGAGCCTTTTGTCTCAACTCCAGCGGCGGCGATACT  
AATTTAGTCTATTTCTTACAGTCCCATGCAACTACTCGATTCTTGGTTTTCTCGGCCTCCCTTAGCCACTCG  
TGTAGCTTTCACCATTAGTCGTGGTGACAGACATAACACGCAACGGTACTTCGTTTTCTCCTCTGCTCCACC  
CCGATGTGGGTGAGTCCGCTCCCTGACGGAATCTTATTGCGCCGGCTATTTTATATCAACTTCCAGTCC  
CGAGCGCGCCCGTACTCTGGCTGAGGTGCGGGCTGCGGCGGCTTCGTCAAACGAGTCTCCTGGTGGGGATTG  
TGTTCCAACACTAGCGGAGTGTACGGACTTCGCGCCGGACGGGAAACTGGTCTGCGACTAGCAAGGGGTGG  
AGGAGCGCCTGCTCTTGCATTGCCGGGGTATTAGCTTCCCCCTTGGCCATGTGCAGATGTGATTGATGTACC

GGTTCGGTCACACGTCTATTCATACGTGCAGTTATACCGCTTCGCGGACCCGCCCCCGACGAGTTCTTCCTCG  
ATCGTTGCGCTATACTAGTACCCGTGGTCTTTGCCAGGCCGCTGATAAATCCTTGTGCGCCATTCCATAGTGA  
CGACGCCCTCAAGAGCCATAACCTCCTCGCCAATCTGTGTCCAGCTCGGAATCCCGTCTCGTGCAATTTTCATCG  
GGCTCTCCTGCTGCGCCTGCTTCTTCTCCATCCCGGAAGAAATCAAATCTAACGCGAATATATTCGGAATCTA  
GTTGATTAACCACGCTAGCTGTGTGGATCCCTTGATTATTCGTAGTCCGTATCCAACCCGTTTCGTCTTTATC  
GCTTCTCGCGTATGGGCGGAAATACGTGGCTCCGCCCAGAGGACCGCAAATGCCTACTTAGTCCGCTTGCTA  
TAGTAGACAATTAAGCAGGGTGACCCGTGATCTCTCCATTCCGCCCCCTCATAATGTCCCATATCCCAAT  
CCGCGACAGTGGACAAACCTGGTTTTAGGAATAACCTTTACACCATAAGCTAACATTGTGGTTAACATACAGA  
GTGTACAAGCCCGCTAGATGTTCTCAGTCGCACTCTAATTACCGGCCCTGGAAAACAGCCTCATAGTAAGCG  
ACGTGTCCGCTTGTTACTATGGCACCTCGTCCACGGTCTGCTTAGGTCCGATTACCGACAGCTGCGACTTC  
ATTGCGCTGCTGTTTATACGGCGATGGCGGCTGATCTTTGGGTGTTACTATAGGACTTCCAGATCGACGCTT  
GCCCCCTCGCATGCGCGTCGATATCCCTTCACTTTGGACCCTTTGATCACCAAAATAATTATCCTGTGATCTAC  
GAAGACAATTCCTCGTAGAAATTGTTGTCTGTTAGACTCAAAGACCCCTGCTTGACAAGTCTGTCTTGATTA  
TACATCTTAGTTCCTCCGCTCCCAACGACGCCACGACACTGATCATATGCCGCCGATGTCGCCGGCCGTAACAT  
CGTGAAGAACAGATACCGAATGTAACGAGTATTGCTATGGTTCCTTGGCGCATTCCCTCACGAATCTTAGATCT  
TTCCGAGTAATATCGTTTAGAGAATGACTTGTTCGCGACACCCGTTGTTATGAGATATACGTTGGCGAAGG  
AGCCGTCGTACACGCCATCCACCGCGCTAAATAACGTTCTGGTCTGTTACGTAGGGACCGGAGCGGTGGCC  
GTATCTCTCTAAATGCACTGAAGCCTAAACTCACTTCAACCCACAAAGTTGCGGACAGACACCGCATCAGTTGT  
TACTTTCCATATGGGAAAAGTCGCTGACATGGGCTTTAGTGACAAGACTCGCTTTCGCGCTTGCCTCCCTC  
TCGTTCTACCGCGCCAAGCGCTATTCACGACTGTCCTGCCAGCGTTATTGGCCTACAGCCCGATCCCATCTGT  
CCGCCGGAACAGAGACCAAAAAGAAGCCGAGCGTGTCCCTTCGCCAGATGTTGCTTCCCTTCTGCGTTGCGTT  
AGGCGACTCTCCCTACGCTAGTCCGAGTTAGTATGGGGCAGCGTGCGGGACTACGCTTCTTCCCGGATGC  
TTCGCCCTACCCAGCACACGGTGGTTCAGGGTATCGCCACTACGGGGATTGGGTGCGGGAGGAACCGCT  
CCATCAAACCTTGCACTCCTAGTTTAGAGCTACCGCAGCTCCAGAATTAGGAATGTCATTGAGAGCCCTCGCA  
AGCTAGATCCCTTAGCTGCCCGCAGTTCAGTACGCTGATCGGGCCGCTGTTGCTCCTGAACCTCCTAGATT  
AACCCACCCAACTCATCCTTGCCTGCCGGCTAACTCCACCGAACCTCGAGCATGCAATTTGTCATGGTTTT  
CGCAAACGCCCTTGCAGCGGCGCCGACCGTGTGCCAGTCCAATAGATGATCCACGTGTCAAGGAGCACTA  
GCCTTCCCTTCACTTTCGCCGAGGACGTGATCCGGAGACATCCTACCTCAACACTGGGCTCTGATTGTGCTCT  
ACTGTGACCCGAAGCTAAGACTCCCAGCCGCTATGGTTGGGGTAGCGGCCGGGTCTCAACCCCTTCTTGG  
AATACGCTATGAAAATTGCTGACCGAGCTAGGGCAGTTTTGTGCTGTTACTCGCTCTGGCTCCAGTGCCTACCC  
TAGTATATTTGCCCCGTTTCTGATCCCTGGAGCTCGGCTTTAAAAGTATTGGGGATGCAGTCCAGCCGAGC  
ATCTAACCTAGTGGCGTTAGGTTTCCAGAGCGGTTCCATGCCGGCGCCGGTAGCTCCTGGCAGTAGCCACCGG  
TATACGGTACCTAACGCGGGTGTGCGATCAAACGCCGCTTTTCTCCAGCTCACTTTACTTACCGCGTGCCTCC  
GTCTTGCTGGAGATTGTTTCACTACGATTCCCGCTCCAATCCTCATATCCTCTACATTTCCAATATCGTTGTG  
TGTGTCTATCTAGCTGCCAGGATACCATTGCGCACACGTTTCTATTATGCACCGGGGGCTAACCGAGACCGAG  
CCCACGTGTGGTCTTTCGATTGATGTCGCCGTTTACTGTGAGTCTTACACATCAGATGATGACAGACTGAG  
ACCCCGTGAAGAGGACTTCTAGCTTCTGACCCAGAGCCGCTTCCATCTCGCCGGTTCGGCTGATACCCCTGC  
CCAGTACGTGTTCCGGTACTGTATGAGGAAGTAGAGGGGCTGTCTAAAGTTGTTGAATATGCTCCGCAAGG  
GTCTGTGGGAGTGTGACCTCCGTTTCTCCGACTAGACCCTCATTGGGGATGCAGTCTTACTACGGACAG  
CTTTAGCAACGGTAACATGCCGTAGAGAGTTGGGCCGGCTTGTGAGGAGACAATGTTGATCCTTCTATATA  
GGCCCCTGGCGCCCGCTTACAAATATTCTAGCCCGCCGACATGACATGTATTAGGTCTCCCTCGCGATCTC  
GCAGCGTCGCCCTGAGAGCCTCGTTTTGAAAAGGTAAGTAGTCAAGGTGTGACTGCACTTTCAATTCCGTCGA  
CTCAGGCTATCGACGCTCACAACAGCTGTTTATTCCAAGTTATCACCTGCACGCTATCACACAATTGTCTGTAC  
CCCGTACTCACCCACCTCTACATCTATTGAACTCCCCCTCCTCGCGACGCGACGGCTGCGACAGGCAAGAA  
CACCAGAGAGATCTTAATAGTGGCCCTTGGGTCTAGAATTGATTCCACATCATATTGCCTTTTTTGGCCCTCC

GCCTTGCTGTATCCAGCCGGGGTTACTGCCAAAGTCAGCTAATCCCTATAATTTCACTCGGGACGTATATCT  
CTCCTTCATAAAGCATCGCCTCGTACCATCTTTAATCAGTTAACAATTCTCTCGCCCGCTTGAGCCCGCGTGAG  
CGTCCCGCACTACGGCTTTTGGCGGCGTGTGGGCGGACGTTCCGACTGACCCTAGTTAATAATGTGTTGTAT  
CCTGTATGTTAGGAGTAGTGTCCAGGAACATAATGATTCTCGTGAGAATGTCTACTCTACACCTTCCCTCCC  
GGCCACCCGGGCCCCGGGCGGCTGACCGTATTTCCGAGAACGATTGCCCATGACTTAATGCTCCGAACACA  
TATCCACTCCCTTGCTTTTGGAGCCGTGTGGGCCTATCTATGCTCCTATAGACGTAGCCTAAGTGAGAGCCAA  
TAACCTTCCGTCTTTACGACAAATACGCGTTTCGTGTGAGGGAATCGATGCTAGGATTGTCCGCCTTCAACT  
GGGGGGGGCCTGCCCGGTACGGACGAAGGATAGACTGCGGGTCGGTCAGTGGTTCGGCTCCATCAGTAT  
GGCGTTGGCCTTCCGGCCACAGGAAAAGACCTTGC GCGGATAACCGTTCACGTAGGTTGCCTGACGGAGTT  
TTTACTCCAACCGTAGGTTGCTTGACCTTCTCCTTACGGACTAGCTTCCCTCTGCCTTCTATGGTGGCCACCG  
CGAGAGAAGTGC GGGGGTAGCAAACGGAATATGGTCCATTTGGCCAAAGCAACTATATAGAGTTCCTTAA  
AAACGCCCGGGTAGATTGGATTCTATTTCTGGGACGCGAGACGGGAGCAACTCCGGTGTCTGAATGCAG  
CATACTGTCTAATGCTTTTCCCGGTGTTTGTCTACGGGCTGCAATATCGGCTTCCCGTTGGAGTAAACGTGA  
GGCGTTCCGTTTGGGCCGCACTGCAGTTCCTCTGCCTGGCTTCCACGCCCCCTGTTTTTGGAGACTCTATC  
CTACAACCCTGTTATCGTCATGTCCCCAAGGTGGTTCGGTAGGAAGAGACTCCTTAATTCAAATTTGTTCAA  
GTCCAGTCAGTTGATCTAGATAAGTCGATAGCCACGCTGTCTCATGTGCCCTCTAAGTTTGTGGCACAAGCCC  
TTCTTCATACGTTACGAGGAGTGC CCACTCCACCCTATTACGCTGCCTTCTAGCTGAATGTATTCCTCTCATT  
GCTGTGTCCCACTCGATTAGCGAGGCCGGATGTTTCGTTTCGTCCTTCTTCACTCTAGGCTCTTAACTGCC  
GCAGTTCGCTACCTTTAATCCAAGAGGACCGAAACGGCTCGCTGGCTGATCACACTTCTTGTGTACTGGTT  
AGCTAGCCCCTCATTAAAGATACAGGCTTACGCTGCATGCAGCTTTTATGTCAATAACAATGACTCCGGTTTGA  
CCCCTTACGGGGTCTGCGCGGACAAGTGGCAAAGTGTAGGAATGTGTGCCGGCGACTCTATTTGACGAGC  
AAACTGTGGCCCACTAACCGATCAAAGTTGTAAGCCGTGCGGTGAGCTGTGGGGTAAACCCCTCAGCAGTGT  
CCCAGTCTCGTATTCGTCACCGTCTGATCTTAGTCTGCATCACCCCTCTCCCATCGTGC GACCAACGAGCGG  
GTCGTCTGGACTGACATAGTTTGATCCTTCGGGCATCATGTCCTGTTATCGTCCTCATTCTAATTCCGGGAGCA  
TTGCCGCTACCTTTAAGAATCCGCGCTTTATTGACCCCAATTGATCCGCCCAACTCTGTTCTTGTGTTGAGGT  
GCCTGCATCGGGCACCAGAGACACTGTCTGGTATCTTCAAACTTCCACTTCGCCCTCCAGCGTAACTTATGAC  
ACGTCGTGATTCCCGCAAGGTGCGCGACCAGTCTGGGGGAGGGCGTGGCGGCGGTGGTGTGGCACTACAC  
ACACGACAAATCTCTACCCCGTGCCTCCTGCCCTACTACCAGATACCTCTCGTCGGCAAGGTTGCCCTTGTG  
GTCGATCCTCCGACACGTCTATGGCCGTTTTACATAGGGCAGATGTAGGGATTGGGAGCCATCGGGATCGCT  
GTGCCTGTCCGCTAGCAACGTGTTGCGTATACCTTGTACGCAAAATCAATGCATTTTGGCTATTAGACCGCCC  
CCGTCTTCGGATGATCACGAGGAACTCTCAGATAGCAGGAGATTTACTTTACAAGCCATCTAGTATCTACGATC  
GGTCGCAATTACCTACTGGAGTTGTATTGAAGTACAATTTAATAGCTATCAAGATTCTTTATCCGCAACGGGC  
TATTACATCTCGTACCCTGCGCCGACTAGACACATTCTCGGACATGCTAGCCCTCCCCGTCGTGCTGGCATA  
CTTATCTCATCTTATTGAATCCTACTCAGAAGCTTGGGCCTGTGTGCGGGTAATCAGTCTGGATCGATGCGC  
TAGGCGGGGTCATTCCGATGTGGCGTACGATGGTGCAGTGCTCGTTTCTGCCTCTACCTTGGTGTGGGCC  
GCAACCGTGACCAGGCGTTGCTGTACAGGTTACAAGCTAGAACGGCCCGTCATTGCTTACTCGCAGTGACT  
GTGACAAGTCCAATTGCAGTTGTATTGATACGTGCTCTGCTTAATAACCCCTTACATCGTTCCCTCTGGTGTG  
CTGTTCCAGTATGTGCCCGCGAATATAACTTCGCCTATTGACCAAAGACATACAGCGGGCACGGAAGGCCGA  
GCAAAAGAGGGCGCGGACCGTGCCGTCCGCTTCTTACCGAGGGCCCCGGGATCACCGGCAAAGCCAGTTAT  
CACCGGCTCCTCCCTGCGTTGTTGTACGAATCTGCGCCCCCTCATTAAAGAGCCCGCCGTAAGCCGCAACGATCT  
GGCGGTGTCTGGAGGTCGACACGACCCCGCGGCGGCCAGCTCGAACGTTCTTCAACATGTCCTTGTGAGAG  
ACTGACGCTTAAACCAGAAATGGGGCGCCCGGCGAGGACCCGTAAGTGTGATGTCGCCCATGGGGCGGCCCT  
CGGTCTTCGAGCGGGTGTAACTACTACCCAACTGGTAACCGCAATCCACGTCACGAGACGGAGAACGGTGC  
CGAGGTGGTAAGTTTAAATGGTTCCACCACGACTTCCCAATATGCTAAACGGAAGATCCTTCGTTTAAATACCATT  
ATGCTGTTCCGTTGTTACTACTTCTGGGAAAATCGCCGCGTCATTGTCCATTCAGGTTAATCACAGGGTCTCAT

GACACCATCGGGTCCGTTCTTAACTTGGTAACCCACACAGCGTCTCTCGCCCGTTGCCAAACCGCCCGTGGCCC  
CCTTGGCTCGCCCTTATCATGTTTTTGTCCGTCACGACCACCGGTGAATAAGACTATGCAGCCGTACCGGGCC  
CTTTTTGTCGTGGCACTTAGGCCACTCATGTATATGACACATTGCTCCTCGCGCAGGAGTCGAGTATAGGTCTA  
CGTGGGAGGCAGGGGGTTTTCGACCATACCGTTACTACCTTCTTTGTGCCGGTGAATCGAGAGTCAGACGAA  
GAGCCCAAGCGTCCTGCGACTTGACGCCGTTGTAAGATGAGACGGATGGTCTTCTGCTCCGCTTGAATCCG  
CCTCCTCTCGAGCCCAAATATCTTTTACCTCATCTATCCCCGAATTGACTGACCCATGAGGCGTAGCGGGTCCC  
CTAATAACCCACCTCCAAGACTTGCGCCCACTGTCATATAATTTCTCCGCATTCTAACGTCAGATATATCACT  
GCTGCGGGCAATATCTTGC CGTGGGACTAAGCTTCAGGGCCCAGTCGCGGGTCCGATCTACACTGTTGTTA  
GCAAAGTACTGAGTTAGAAGAGGGATTAGATCTCCTGAGCCGCTTTGGCTGACATAATACAGATCTGGGAG  
ATTGCGAGGACAGAGCTACGCCGTGTCGTA CTCTGTAGTGGGCGCTACGCGGACTGAATCCCAAGGACCA  
ATGGTAGGCGCCCCCTAATCGAAGACACGATAGAGGGATGCTGAATCACTTTGGGACCATCTCACTATTTAC  
TTACCGCCATCGGGGCTCGTGCAGTCTGGTAATACCCAGTTACCCCGTTTGGTTGCGATGGGATGGAATTC  
GATTGTGTACGCGTGA CTACTCGGATAACCCGGCGACCAAGCGACATGGGACCCATCACTGAGGTCTCTCTT  
GAGACGAGATTGTGTGACTTAGCACTACATTAGCTCAGGCTCAAATCGAGGATATTGCGGCACGTGACGGGC  
CAGCTATCCCGCAGCCCTTTCGTC CCAAGATGCATCACTTGCCCAAGGTAGGCTTCGCGTGTAAAGCAT  
ATCCCAGGAGAGGAGCCGGCTCGCATGTGGGTCGACTACGCTTAGGCCATTCGGGGATTCATACATCGACGG  
GTCAAAGGCTTGGTCTGAGCAAATTATTCGTCATGGTGGGCACTTCGGGTTCAAGTCACAAATTCCTCTGAGA  
TATGGCAAGGGACAGATTTCACTCGAGACACGGCTTGTCTTGA ACTGCTCCCCTGTACATCGTCCCAAGGC  
CAACCTACGTCGGGGAAGGGCTCTTGCATATGCGTTCGGCGGGTAATGAAAGGAACCAATGAGTGTGACA  
TCGAGGTCCGGTGA CTTAGTTTGGATCTATATGTGTATAGTCCCGACAGACCCGTGCTTTGAGGGTGTGAA  
CCTCGTGGTACTTTAACCTAGGCCACGGGCCCGGGTTGCATCCGGCCCATCTCTTTTCCA ACTTCTCCATTG  
GCCTCGGGCACAGGCGCCAGTCGGATAGATGCGGTGCGCGCTAGACTCGGCTCTGATAGTCCCTCATTCTATC  
TTTCGTGTCCCGCGCAGCTGATTAATCCAGGTTTCGTGTGCGTGTGCCGGCTCGCGAAACGGCTAATAGCTGG  
ACGGTACTGCCGGCGGCGTTAATAGATTGCTATGCTCGCTCGGGCGTGCACCACAGGTCTGCTGCGGAGTAG  
TACGCGATTCTGTA AAAATAAGCGCATGAGATGGCTTCTGCTTAGAGCTGTCCGGAGGCTGTAAAGCAATAC  
GGATGTATGAGCGACAAGCATTTCG CAGCATTAGGGAAGATCCCTGCTCCGGTTTAGAAGACCGGCTGGTGAA  
TAGTTAACTTCCGCAGTCTTATGTCCAGTGATACAATCGAAGATAAGGCCCAATGGCGCAACGCGGGGCTGCT  
AATCCTTAGTTACTCAGTATTACACAAACCGGCGTTGCCAGCAGTTAAGGGCGAGGGCCGGGCAACTCACGCT  
ACGTGAAATGTAACGAGACCAATCCCGCTGCTCACTCAGCAAAGAGAAGCCGACTGATTTAAATGGAGAA  
TTTAGTAGAAAGCTAACAGAGAGGATGTAGCCGCAAGAGAAGGGGAGACGAAACATGCAAAAAACCTTGAT  
CTGGTGGTCCAATACTGCCACGTTGACCAGCGGAAAGAGCCCCTGAAGAGCCAAATTTGAATTGGGGAATCT  
ATATAGAGAAAACGGTAAGTGT TTTGGACTGGGTGAGCCACAATAGGACGCGGAGGAGGGCAATAGGAATAC  
ACATGCGCGTGGTCTGAGTCAAAGTAGGGATCGGGAATATGTAAGCCGTTCACTATCTGAACAATGGAGGAA  
GCCGAACCTTTTAGAGGTCGTATATACTGCGGGCCCTTGGGAATGGGGTGCTTCTGCTGCGCGACGGTAGAG  
CCTCAAGGGAAGGAAGGACGTAGGACGAGTAATTATAGACTGGGGAGGGATAGTCCCGGAACAACAAGCAT  
CTCTCGAACGTTTAAAGTTTTGTCTGTGTCCCAACAACCGAAATCGGCGCCGAGCAGATTTTAGTGAGTCTTA  
TTAGTAGTGTGTGTCAGTGTTCACCTCAAGGTACCCGAATTAGCGAGACGCTCGTAAAACGAGTCCGGGGAC  
GTTTTGGTTGATGCTGCGGATGTCATGGTAATGCCAGTTCCTTGGTATTAATCGGACGAAAAATCGAATTGC  
TACGTAACACGGA CTCTAATGATACGCTCCTCGAGTCGAAGGCTTTCTGGGTTGACGTCGTACATAGATG  
ATTAGTTATACCAACCCCAAGGATTTTGC GCAGA ACTCTTATGACTAATATGACGGCGTTTGTAGTCGGAGGT  
GGGGTGAATATAAACGAGATATCAGGGCGCACACAGTGGAGCTACGACGGTTTTCCCTGACCTCGCGTTTC  
CGGGGACCATCCAGTTAGCACGAGTGGACAATCGGCTTCAGAGGGGGAATACTACACGTAGCCTGTGCGAC  
ATTACGTTTGTGCTCAAGCACGAGGCGTCGAGGTTGGGCCTGTCAAAGGTGGAGGGATGTATATCCGTTTATT  
TCGCTCGATAGTTTATACCGCTAGGCTGTATTCGATAGTCGGCGCACTTGACGCGTTGTTTCCCACCATCAC  
TCAAACCACATCTCAAATAGCCAGTATCCAGTACAGGCCAGCGCTAGCGCGCTTGC GGTGAATAGCATACA

GGCGAGAAGACTGGGTGGGTAACGCATGTATTATCCCCACGGTCAGGCTATAGACGGGCCATTTAGCACT  
GGGCGCCGGGGTAGTGTTAAAGTTAGTCTCTCCTAGAGGGCAAGTCGGGGTCAAGGTCTTCCAGAGACGTCC  
TTCTCGTAGAAATTGTCCTTTTTCATGGTGAACGATATGCAGAACAGACAAGCTAGGTTGCTCGTCGGGAGCC  
TTTTACTCGGAATTACTGGTCCAGTTTACACGGAACTTAATAACGCATAGTCGAGTACTTGCAAGGAATAGCTA  
AGTCGTTTGC GGACTCATGTCGTAGAGTCGTTACGGATTAGTGAAAACCGAGGAAGCTACGCTCACCTGAA  
CCGGGGGAGCTTTATGGCGACAAGTCGAGAGATGGCGCCCATGCCTAAGCTTGCCTGCAGGCGTAGCCAAGT  
CATGTGGGGGGGGCGCTTTAATTAAGTACGGTGGCCGGGGATGAAAAGTGAGACGTAGGGTACTGCTGGCG  
GCAGTCTTCATCCCGAGCAATCGATGGGCCGGCTGACCTGACACGGTCGATACGGCCGCAAGAGTTCTGAG  
CGGTACGTTTCGCTTTGGCAAATCGTACTGTTGCCCCACGCGCAAGTTGCACCGAGTGATAGAACTGGATA  
GACAGGTAAGCCTCAGCGAGGCAGGGGGAAGACATGCTTTAGGGTCAGGCTCCGCACGCTAAGCGGCCCT  
AATCTCACTGATTGCATGTCCTTACACTGGACCCCTGCTCCGTGCGTCGGATCCCTTTGTTGATACGCTAATAC  
ACGCGGGGAACACGAAGACTCTGGATTGGGCACACTCCTCAGTGCCAGCCCAATCACCGAGATGGAATTACG  
CGAGTGC GGAGCTGAGCTACAGTTGGAGATATACCGTGCATTTAAGCATAAGTTAACGCTTGGTCGCGCGCC  
CGGTATTGTTGGACATCGAGTCGGGCAAGATCAGGAGTTGCCACTTCATGATACGTTTTGGATACCAAGATCA  
CGGGCGGTTGGTGAGGCGGGGGAAGATCGAATATGGTTACACTGGCTCGCACGTGGCATCGGGGTACACGG  
TCAGTAAGTAGCTGGGCAGGCCTAGGGATATTATGTATAACTTGATCTGCCGAGAGGAAAATGTTAAGGGAG  
GGAGTAGAGTGTTACAGGTCCTAACGATAGGACGATTTGCCTTATGACTATACCACACATAGTGGAAGGAATAT  
GATAGCACATGAGCACAGCTGCTTTACGCCTAACGGAGGGCCAACACGCGGGCGTGAGATTATCCCGGTGT  
CCTATGTAGGGGCCGAATGTTTCGGACGAACGCACCTGACCGGGGCCAGTGGGAGTGAGATGCAGAGTAGC  
ATGGGGCCCCTTAGAGGTGAGTGAACGTAGGCAAGCCAACTCAGGACCGAAAGAAAATAGTGCGAATCGTAT  
ACTCAGCACTACAAGAAGGTGCGCAGACGGAAGGAGATCGCTGAAACGCGCACCAGCACCCGCAACTGCAT  
GTTAGGTACGAAAGAGCCCTGTTTCAGCTGAGAAGGGTGGGTCTAACGGGGTTAATAGCCCAGATGACGAC  
AAGTAGGCGGCCTTCAGATTATTGGTATCCGTTTAAACAAGGACCGATGCCGACTTGAGGTTGCGCCGAGAAG  
ACATAGTCAGACAACTCCTCATCGGCACTTGCCTACGCAGCGGTAGAACAGACAAACCGGGGGTGTACGAG  
AGACAAAGAATTTATTACCGTCAAACGGGGGAAGGATAGACAAGCTCGCTAACTTGTGCTGAACCCGGCG  
GGGGAGGGTAGCGGTTGGTTAGACCTAACATAAACTGCGAGCCGGTCTGACATTATTGAAACCTTACGCC  
ATCCAGGACATGATAGGGCAGCTAAGAACGCCCTTAAATGGAGAGGTCCAAGAAAACCGTACTTAAGTGATG  
GGTAATAGTACATAAAGGTCAGTTGCGAGCTACACTAAGGATCGGGACAGTCTTAGTCAGGGAGAGGTGGAT  
CGACGGAGTTAGCGAATTGCTGTTCCGAATCTGTATGAGGACCAATAGAAGAGCCAAACACCTGTAACCAA  
AGTGGGCACTCCCTATAGCACGGTTTAGTCGCGACCGAGGTGATCTAAAGACACGGCGTCAATAGTGAGGG  
GAGGGGGGAGGTTTTACAGTCAACATTACCCCCAACCTTGCCGGCAGGGATTAAGTCGCCTTAGCATAACC  
CTAGCCGGATGACAAAAGTAGCTCCTTTGATCCCGTCAATTGCGAAGAGAATCGCCATAGGTGCCCAACA  
CCGAGCTACAAATAGGTTATGCTACACAGGTATATCTAGTATAGAGCAACCTGATACACTGGCGTGCATGAGT  
AAGCCATATCTAGCCTACGCAGCATGACAAGATGCGGGACAAGATGGCCTTACGATGAGAAGGTGGGGCCG  
AGCGCCAGAACCGCAACACCGACGGCAGTCCAGGAACCGAGTAGGCGGGCCAAAACGAATGGGTGCTAGG  
CAAAGACGCCTAGAAATTCTCAAGGCTACGGTTGAAAGACAAAACACGCCACGGCGGGGTGCGACGGGAAG  
CAAAACGAGTGGGATGCTTCTTTGAAAGGAGATTAGGGCCGAGCGTGAATTCGCAAATGGGAGGTGGAAGA  
AATAATGATCGAATAGGGTCAAAAGAACGAACACTCCGCTACCATGCACTGTTCTGAGCGAGATTTGAGATTT  
GATCGATAACCTGGGATAAACGTCACCTGACTGGGCTGTGGGGTTCCGAGGAGGCCCCCGGAGAGCCGCC  
CAAGGCCTATAGTGTGTAGGTCCACAAGTTAGGGTCACAATAGGGAATGGTGTGGAATGGGATCAAAAGTG  
GACTACCGGTGGGCCCTTCTTGAAGGTGTGATTCACACACGCAACGTTACGCTGATGAATGGAGGGCAGCA  
ATAAGAGCCGACCGCGTGGATGGAGGGATCGACGTAGTTAATGAAAGGCACGTTTTGAGGTGCAAGCGACT  
CAGACGGCTGCTCGCTGCCACCCTTCTGCTGCTCGGCGCTGACACACAGACTGGAGTAATTCCTCCTCAGTT  
TGACCGCGACAACCAATTATGACCGGCAGAGACTACAGGATCTTTATCCGTGAAAAGCAACGGAGGGACC  
CTAAAGGGAACGCGCGGGCAACTGCGTAGACGCAGCATGCTGCGACACTGCAAAGTCGCTGCTTAGAAGTA

CATCTAAAGCCCATGACCGAAGTGGTTTCGAGAAGGGGGTAGAAACGTGGGCTTATTACGGAGCGATGCGG  
AAAAACGCTAGTATTCAGACACCACAAATAAACAACCTCGCCTTCGGTTAATGTACGAAGTGATGGAGGAGCA  
ACGACGGTAGGCCAGGTGAGCAGAAGCGACCTGGCCAGTTGACCCAGGAGTGTCCCTCGTGTTACAGCTGCT  
ACTGCGAGGAAAGCGAGAGGGAGATGAGTAAAGAACGCAATATAAGAGAGGAGGACCGATCCGATCAGAA  
GATGCAGGCATGATTCCGAAGGGTCTCGTCGGAGCCACTATACTTTGGGCTAGCCCAACATTGGTGACGGT  
GAAACAAAGTAATGGAACGGCAAACCTACGGGGCCACCTGGTATTCGGTTCTGTATGCGGGGAAATCCTACAT  
GGATGCCGCAGTCCAAGTGATCATTAAATATCCTAGTTCGCATAAGTGAATGCCGTTAACCGAACTCCGGGGC  
AAGAAGTACTGCAAGCTCAGTCCGGGATGACGCCGTGCCACGAAATAAGGGCTCTGTAGCGCGGGGCTTGA  
ACGCGGGATACAGCTGAGAGTTATCTGGGCAGTCTGAAGCCTTCATGCTTACGGCTTTAGTGATCATAACGCC  
CTCAACGTGATCCTATCGTTTCCGGCCTCATTTTGCGGCGGCCATTAGCGTATTAGCTCAGGGGCTGCATAGA  
AAAAGAATCGCTAGTCTTCTGGCAATTACCGCGAAGATGGCGCCTCATCTTAAAACCATAAAATGTCCCCAG  
CCCCAGCCACGGAATGTCGTACGAGAAACCTCAGCTAGTGTAGGTAGGGTCAGGTAAAAGTCGACAGAGG  
GCAGAAGTAGACATGAGCATCGCAGCGCCCCTGGGAGTAAGAGGGTCTGAGTGCAGGCACGCGCACCCCTAA  
AACACAATGGGGCCACGAGCAATCCGGTCCATCGCACAGTTCGAATTACGGTGCAGCAGGGCAATTAGGA  
TGACGTAAAGTCGGAGGAGAAAACAACCTGGTCCCAGAACCTCCAGGGACAAAGTTGCGAGTGTCTGTGTGG  
GAGGGCTTCCCAATATCCGGAGAACAATTGTCCCCCTAGCTGCCGCAGACACACTCGTGAGCCTAGGCGA  
TCATGTGCACGCGGCCATCCGAGGACCCACCTTCAAACGGTTAGGTAGGGGTTTCATCTTTTACATGGACGA  
AGATGGAGCCAACATCAGAACGCTTGGCATCCTGGTCCGTAGCCGAAGGGCCAAAGCAGATCTCCATTTCC  
CTGCTGTGGTCCGCAATTCGTTGGTACCTCTTTCATGCGCAAATAACAACCTCGGTGGTGGCACTTCCGAAGTGA  
CAAAGCCGGGGCGCCGTCTAGTGTATAAAATAAGAGGGAGACAGGGGGCAAGGCGTGCCGTATAAAAAACG  
TGAGGATCGACTTGAACAGACCGACCCGTATGCGTGTGGTCTAAGCAAAAATGCACGGAGCGACGGTTGCGG  
ATGAAAGTCCACATCACCGCCCGATAGAAATGTTGGAAGAGTTGTTAACACCGCTGCTCGTGTATGACCAA  
CGGCAGCCTTGAGTCTGGGACGCAGCACGGGGTGTGTTTGGATGCGCACAGGAGTAACAAGAGTCATCCGG  
CGCACCCCATAGCTGAGTGTAGAGATACAAACGAAACCTTACGGAACGTCTCAGAGAGGACTGTAACGGTT  
AACGAGGCACTGACGCGAGAAAATACCAATGCGCAGCTAGATTTGACGGGAAGTCTGGTCTGGAAGCTGGTT  
GTTCAAACAGGCGAGGACGCACTCCGAGCACGACAGTTTTGCACACGATGCTGCTGCGACTGTGAAGGCGAA  
AGAGGGGCGAAGATGGGAGATGGGCGCCTCCAGCTCGGAAAGTTCGGTTCTGCTCGATGAAGAAAATATG  
GGTTCAGGCGGTGCGACCGTTTATGCGAACTACTGCACGCAATGACATATACAGGGGAACGGGGAGCGCGC  
GAGGCAGTCGATAGTGAGCACGACTCAGATCGTCTGCTCAAAGTTCAGGCTTTTCCAATAACACAAACGCAT  
TTATCCCGCTAGTAGCCTAGTGCAGGGGGCGGATGGGACTTAATCTCAACCAAAGAAGGAGGGCGAGTGCAC  
GATAGTAAGACCTCCCCGGAAATGAGGTGGGGAAACCGCACGCGTAGACCCTCAAGCACTGTTTTTGGGCG  
TATAGTAAGAACGGTTGCCCGAGGCGTGAAGCTTGGTATGCCGGCCACCGTAAGTAATACGCCTCGTGCAC  
GGAACTCGAAGCGCGGAAGGAGGGGAGATGATGCTGGACGTCGAGCGTTACTTATTATTTGTTGGAGAGT  
TACAGCGCTCCGAGCAACTGCGGTACAGTAAAGAGTCGGTATCCGAGCACGACGAAGGCTTTCTTTGCCAC  
CGAGGCCCGGACGCGTACACCCGGTAAGAACCTGCCGGACCTGATATGGCATGCGCAAAGCGAAGTTGCC  
AATTGGAGCGGGCCGCTTATTAGTGCGGAGTAAAAGGTGAGAGGGTGAAGCTCCGCAAGTTACTCGATAT  
GACTCGGCGAGGACGGACGGGCCCAAGATTTGGACCTACAGCCCCTTGCATTTGCAACCGTCACTTCGAA  
TGACCACCTATAACATATAGGCTCATGGCGACAAGGACGTGTCACGAACTAGCCCGGGCCGACATTGCCGAA  
ATTCCGAGAGCCATTGCATGACCTTCGATACGGACCCTGGGGTATGTTTTCTATGTTAGGAAGGGGCCCTTC  
TAAAACCTCGTACGGGATCAGTCTTGATACCGTGGTGGCGCAGGGATAAGCTTTCTGCAGACGAAAGGCGGA  
CCCGTTATGCCTCACATTCGGGGGTCAATAAGATACCGAGAATGGGATGGGTCCGACACCGGCCAGTAGAG  
CTGGATATAATAACGGCCGAAACCAGCGCAGGGGGGAACCGCCACGTGCCACGGGGTCTGCACTCACGG  
CAGCATCTTGTAGAGGGGCTGGCGAAATCACGGAACGGGGGTTGGAATGGGTGAGGGTGGTACTGATGCA  
CAACAAAGAGCTCCCTGGCGTCAAGTGGCAGGCTGAGGCCAGGCTCGGCACTAAGAAAGCGTATATTGTGCG  
AGGCGATCGCGTTCTAGACCCGAACCACATGCTTGTGGGAGACCCGTTACCACGAACCTGGGCTCATAGG

AACTAGGTGATCAGTGCCCCGGTTGTCGCCAATTATTTGGCAGTTGGCGCCTTCAGGTCCCGTTCCCATCTAGG  
GCCTATGCAGCGACTGCCGCTTAGCGGCAGATTGGTAGCAGGAAGCCAGCAAAGGGTCCCTAGTATAAC  
TGGCGGACTCTTTTCTACCACGGGTAGGCATTGACGCATCGGCATGGCCACCGGCAGCACACAAACAAG  
AGGGACGAAAGGGTGGTATATCGTGAGCGCTACGGCATAACCAATACGTCTGGAGTCCAAATTTGGCCCCCTA  
GGGAGGGGGTTCGGGCAATAGATGAATATCAAAGGAAGAATTGTATAACCAATAGCGGGGTAGAGTGTCCA  
ACACCATAAACAGCTAGCTAGACTGCCGAATTAATGGCCCCGACTTCACCCGTGCTCGATCCCTGGAGGTGG  
GGCTGTCGATAACTCCCTTCGGGTTCGAGAGGTGAACCCCAATCGAGGAAAGAGTCTAGAAAAATGCGGCGC  
CGGTGACGCGTACGCCAGCTTCACAACACCGTGATAAGAGTTAAGCGTGCAGCCCCGTGCCATGGCTAGTCC  
ACTCCCGGAAAAAGGCTATCATCGAATGGTACGAAAGTGCAGAAAGTACCGTAACAGCAGCGGTGCGAGT  
AACTTGGGATAGAGACTTTCTGCGTGGTACTCGGTTGAAGTTTTGACCAGACAACCTAAGGGCGTCAGCAAAT  
TCACCTAGCTGCTGGACATGAAGTAATGCGGAGCAAGGGAAGCTCAGGTATAGGTGAAAGTTCATCCGAGGT  
GGGAAGTGGAGCACACAGAAGGAATCGGACAAGCTGGTTTTCAATCACGCCATACAGCCGACGCACTCGGAT  
GTGGTACTCAAACATAATGAGGTGACAGTAGAGAGAATCCGGAGACGTTGTAGTGCACCTTTCTTACAGCTA  
GAGGAACTACCCAATCATACCCTCGTCGCGGGACGAAGACAACGCTTTGGATCCCGAGGCGGGTTAGGACGT  
TGTTCTGTCTAGGTCAATCCGAAAGAGATTCCGATCAATACTCGTCCGAGCATCCGGGGTTCAGCAACTTTAAA  
CCGACGCCGGGAAAGGTTTTGAAAGCGAGCGGAGAAAACAAGTAAGCGTAGCGGGCTCGTCTGAGTAAAA  
ACGCTTAGCAGGGGCTGACCTTGGAACCCATTTAATATCTTGTGTCCCCACCTCCGGAGCACCAGCAGCCTCGC  
CTAGAGAAAGCGACCACTAATACCGAGAGGCTCAGACCCGACCTGCACTTCGTTTTCCACCGCATGGAGAA  
GTCAGACAAGAAAGAGTACCAGCACCTAACTACGGCACCGAAGCGGAAGGAATGGGCGTCTCCGGGCTGA  
GTGCCACTAATCATAAGAAATACACGAACAGGGAGTAACAGAAGATACGTACCCAATTAGTGCATGAGGAA  
CGTGTACCCATAAGTCTACGCGACGCACGAGCAGTGAATGAGAGAAGGGCAGAATAAGACAAGGTCCGGC  
TCCGACGGGCGGAGAACTAGGTGTGTTCCCGAGCAAGGGTAGCCAATTCAGGCCAACGTGAGATCCGCTG  
GCACCTTAATTACCGTGTACACCGGTCGTGCCACACGGCACGAAACGTGAGACACTTGGAACCTAAGGTGAA  
GGGTTCAAGTGGGGAGTACTCGTTAATATATGCCAAGGGAAACCGTGGGATTCATGCTGGGGGTCCGTAGCA  
ACATAGTACATGAATGGTTCCAACAGCCACACAAAGTCTTCCACAGGTAGGCCGAAACGATGGCTTAATCGT  
ACTTGCGTTAGTGGGCCGAGGCACCATTGGGGCTGAAAGGAGTACAGCCAGCGAAACGATCGTGGGAATT  
ATTCGGCCTCCCCGTGTCCGTGGGACAGCGTCACGCACGCCGAGGTCGAGCTCAGAAGAATGAGGGCCCACT  
CCCTGGGAGTTGCGTACGCGAACAGAAAAACCCCTCCCGGTTGGAGTGGGGTGGACGGAGCGTAGCACGCT  
GACGCGTAGTGCCGTCTAACTAAAACACGATGATGAACCCTTGAACAGCACAGCAGAAACATACGTAGGACC  
TGGGATCTCGGACTAGCAATCATGACCTAATAAACTGTGGTAATTCAATGCCGACTTCAAGACCAGTCGGA  
AATGGCAACTGCACTTTACGTATCGCACACAAGACGCTCTCGCGTATGGGTGACGGGGAAGCTCGGTAAGA  
CCGTCAAGTACGTGCGTACGTAGAGAGTGGCGTGATACCTCGTTACGGGTGCTGAGGTACGTAAGGGCTAT  
AGGACATGGACGGAATGTGCACCACTGACGATCTGTACATTTAATGGACTATGACGCGACTCGCACTATCTC  
GGCGCTCAATGAACGGAGTATACAATTTGGGGACTAGAAGGGAGGGAGCGACATATAGCTTGCACAGCTG  
CCACAACTAACAGGAGACAGAAAGACTCATGGTACATGACACAGTCACCGAAGCATAGTGAGTAGGCGCA  
TGAACCAAAAGTGCATCAGCCAGATTTACCGGGCCGGTCAAGATTCTAAATCTAAAGTATGCAACGGAGCG  
CGTGCTCGATACGTGGGAACAGGGCACACGATTATCATTAGTTAAAATGACGGGCAAATCTTTCAAAGAC  
CGTAGGAAGGACGGCTGGCGCTAGGCAAGAATCTAAGTTGCTCAATAGGATGCTACATCGGAGACCAATAG  
GGGTGCGATTCTGGTGACATGGCGCA

>E7, London\_26, VIM, 06.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA

GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCCGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAAGTCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA



AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGGTTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCCCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCNAACAGCATGAAGTGTGTTTATAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGACGTGCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGNCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACNCAGGTGACGGGACGACTGTCACAGAGTATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTCAACCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTNCNTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCGAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGCGGGGGACTTTATACGCGCC  
CCGCTTGGGCCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGNCTTGGCCACCTGGACTTGAGTACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCTCCGTACGG  
GAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC

AACTCAAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTCTTTCCCGCCAGTGTGGCCAGGGTGTGGTTCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCTCATTAAGTGTCCGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGNTATTAAGCTTCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGAATTGGATNGAGGTTCCGGCCTGGTGCTTTCGCCGAGCTAAAGNAACCGGGA  
GCGGCAAATATTGCTTGTATGTGACTGCGGGTATGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAA  
CACGGCCGACGTTTTGGTGAACCGTTAAGGNNGGTCCTGTGGAGGAAGACCTCCATTACAACAACGGTCCC  
GGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTACCTCACC  
CCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAA  
ACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACA  
TTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCC  
CATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAG  
GAACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTANGATATTTGGAT  
AGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAGGGCTTT  
TACTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCAT  
GGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACANAAAGNTGGGGGCACCAGGGATTGCACG  
GCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCAATTACAATACGTCTCTACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGNGNGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCCGGCGGTTTTT  
GCGCAATTCTACGGGACGCACCGCGTGTGTACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGNTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGGCAAGNGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG

GTCCCGTTTCGAATATGTAACTTTGGAGCATGCTTTATTCGCACTCNGGTTGGGGATCTTTCCTATACTCAAT  
CTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAICTGT  
AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCCGCGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCTGTACTCAACTCAGCCGAAGACGACGGACAGGG  
TCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGC  
CGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCNNGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTTCGGCAACCG  
ACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGG  
GCTCCGTACAGTTGGCGATCTCATCTGTCTGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACG  
ACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAAC  
GAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGTAGTCCCACGCCCAAGGCTCTCGGCGCA  
GTGTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATC  
GAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTT  
GCCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAG  
GAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTA  
CCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTAC  
GCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACTACCCCAAC  
ATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGG  
TGTATGTGTAAGTGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCA  
GCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAAAAG  
AGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTTCGTAACCCCTGTACGCGCCATACCCCCAAAG  
AGTTCAATGACCNATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAGAGCCCT  
ACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGA  
CTATCGACCCGCGTGTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGG  
GTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTGAAACCCAGGCGACCGGGCAATA  
CAGGGGACAAACACACGGACTCCACGCCGCTTTTGTGACTGAATCGCGACCTACTTGCCCGATGTATATA  
ATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTA  
CGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCG  
TCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAG  
TCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCATTCA  
AAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCA  
GAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCC  
CACCAGCTGGAACAGGGCTGGCANATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATC  
GTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCG  
AGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGC  
TGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGG  
ATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATA  
CACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAA  
CGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTA  
AATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGANCGT  
CTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACG  
ACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTC  
GATGTGACAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTAAGTCAGCG  
GACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAAC  
GCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTG

ATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGG  
CCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAG  
ACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGC  
GACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGG  
GTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGTTGATGTC  
AAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTG  
CGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAA  
ACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGC  
AAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTG  
GCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAA  
AGAAACAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGT  
TCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTC  
TTACACCCTGCCCCAACC GCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGAC  
GGATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAG  
CTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGCCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATT  
ATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGGCGAGACGGCCTTCTCGGC  
ACCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTTAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTC  
GTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACANACGAGGGTACAACGCCCGCTATGAGAGCCCA  
CGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAAGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAANGAGTGATCAGAGCGCAACAAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATT  
TGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAATGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA  
GCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACA  
AAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATG  
GCTGCACATGTATAATTGCAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCC  
AGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGG

TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCACCA  
TAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGAAAGTTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGC  
AAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGG  
GCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCT  
ATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGA  
GTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACA  
CGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGG  
CGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAG  
ATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGG  
AGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCA  
TTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAG  
CATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGAACTGAGATAACAAGGATCGTATGGACCCTCA  
AGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCC  
TCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCG  
TCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
TCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAA  
TAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCCAAAGCACCCTTTGTGTTAATGTGACG  
AGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCT  
AATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGG  
TCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGNAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCCG  
AAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTGTTATTACGATCTTTCTGCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG

GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCAAGGTGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACCAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P32, London\_17, VIM-2, 10.11

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCTGTCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGTCTA

CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACTCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCGGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCTGCTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCATATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGGC  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTTCCGGGGCTGTC  
CCTAATAGATGTAATGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGGATGGTCTGTAAAATATCGGGACACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG

CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGATGCCTATCGTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCTTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTCACCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGA ACTATTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
A ACTCAAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGTCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCNTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTA ACTGTTCCGAACATCCAATGATGCTTTAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCCGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCATTCA  
TACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT



GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTGCGCCTGGTGCTCTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCC  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCACCTACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCNNGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCGACTGCGGGCCCTTCTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTGTTGCTTACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCNNGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCGACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGTTTTTGGC  
CAATTCTACGGGACGCACCGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCGATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGT  
CAGATGGGGCCGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAG  
CCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAA  
CCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTC  
CGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCC  
GGTTCGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTATACTCAATCTGAA  
TCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATAT  
GAACAGCCGGCGTGCCGTAAGCTACACAAANATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACG  
AATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCCG  
GCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAG  
TGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTG  
AGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTGGCAACCGACGGAC  
TGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTACAGGGCTCCGT  
ACAGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGCCAGCGCCCCGACGACGGATC  
GGTGTGACGATCGACGTTTATCGTGTGGAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGGC  
ACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTAC  
ATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTC  
AGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGA  
GACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTTGAATCTGTACCGCTATTCTGGATAGGAAGG  
AAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACGGGG  
TACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGAC  
TGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGCGGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTAAGGGCGCTTATCTNNGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGCCCGTATTACCAACGACGACAGACCAAAGAGGGCT

CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGNNGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACAGAAAGCACGCGTGCCTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTTAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAATTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAAGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCGTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG

GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGCAGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTCAACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCCCGCAACCGTAATCCCACAGCGGCGTCACT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACCTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAATAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTACATAACCTTTCGAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAAGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCCTCAA  
GCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCTC  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT

AAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACCCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGTTACCCCCGCGCGCCGCACTTTGTTATTACGATCTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAAGTCCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>E8, London\_26, VIM, 06.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACCTACTCAACTTTTGTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACNTTGC GGCTCTGCGTTTCGCTACCCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGC GCGTTTTGCCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGC GCAATTATTAGCACGCTTACTTACGGAGGTACCC

GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCNGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAGC  
TTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGC  
GCTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGA  
CCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTAC  
CTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGATTAG  
TCACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTT  
GGTTCCTCTTGAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTNATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTCGGTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTGTTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTNCAACAGCATGAAGTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGACGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGGCTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACNCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTACACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAANTTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAAGGCGCAACTTGCGGAAGNGTGTTCGGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACNNACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC

CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCNTTGGCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCTCCTCCGTACGG  
GAGAAGAACTATTTTCATGTTTTGCGCGTACCCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACACTCAAAAGTCGTGTGCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTANGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CNCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTTTTGTCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTCGTTACAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGNGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACNTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAG  
GTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCTCGAGTGGACG  
TGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAG  
GATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAAT  
CTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTT  
CATAACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAG  
CTGTGGGGTNGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTTTCGCCGAGCTAAAGAAACCGGGA  
GCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCNTAGAATA  
ACACGGCCGACTTTTGGTGAACCGTTAAGNCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCC  
CGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCAC  
CCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTA  
AACTNCCCTCCGGTGAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATCAC  
ATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGC  
CCATGTGCGATNTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAA  
GGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCTTCTAGTCANTGAGTACGATATTTGGA  
TAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAGGGCTTT  
TACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCAT  
GGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACG  
GCAGCGNGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGGCTTTTT  
GCGCAATTCTACGGGACGCACCGCGTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGANCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTT

TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGA  
ACGTCAGATGGGCGGCCACTGCAACTAATGTCCTAATCCTGACGGTNGGGNTTCTCANAGCCCAATGCACA  
GTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCACGTGCTCCATTTGGCATTGGGTGGTA  
CGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCACATG  
ACATTCGCCACAAGCTCTGCCACTCGCGTGTTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTA  
GGTCCCGGTTNGAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACTCAA  
TCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTION  
AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTACTATCCTGTACTIONCACTCAGCCGAAGACGACGGACAGGG  
TCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGC  
CGATAGTGGCGCCACTGAAGCCCAAGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCCGACACCGTGCGGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCG  
ACGGACTGACGCGGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTACAGG  
GCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACG  
ACGGATCGGTGTCAGATNGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAA  
CGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGC  
AGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGA  
TCGAACTCANACTCGGACGCAAGCACAAGGTGTAGNGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGG  
TTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTTGAATCTGTACCGCTATTCTGGAT  
AGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGC  
TACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
NCGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATACTACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTAC  
GGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCCGATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCNTGTNAGCGCCATACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAANGAGACCGGGCCCTACAGTTGTGCTGAAATGGACTTATACTCGACCAGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTTCNGATCGTGACCAAGAGCCCGTACGTCCCCCGATGCCGAACCAATCCAATAAATAT  
TTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGC



CGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGA  
GCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATG  
AACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGNCCGACCAGAAGGC  
GCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTC  
AGCGGACCAAAGATAGGGACCAAAGTAGGTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAA  
GTAACGCTTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGC  
GGGTGANNCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGNTGAAGTTATAGGTCAGG  
CTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAG  
AGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAG  
GAGTGCAGCGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGG  
AGAGGGTGGGACGGGTGGCGTTCCTGGGTAAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGTT  
GATGTCAAAGTACCCATAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGTCCG  
TAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGTTTCTCCGGA  
CACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGC  
ACTAGCAAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACG  
GTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCGA  
CGAAAAGAAACAGACCCCAAGTACTGGTGGCGTGTGGGGTCCATTAATGAAATACGGACGAATCCG  
ATGCCGTTTCGTTACAGCAGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAA  
TTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACC  
TGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAAACGGTAGGCGAGGAACA  
AAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACA  
TCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTC  
ATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGC  
CGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCA  
ATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCA  
TTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTG  
GCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGA  
AATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGANCATG  
GCTATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCT  
TCGGCACCGAATTATTTGTTGTCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAG  
AACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGC  
GCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGAGA  
GCCACGGGGGAATCCTCGCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAA  
GAAGTTGCTTGTAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGA  
GAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAA  
GCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAG  
AGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGC  
AGCCTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAAGGA  
CTTTAATAGGCGGAGGTCCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCGTTATAAAA  
ATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAATGACTCAGGATTCGGGCAACCGTAATCCCGACAGCGG  
CGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTAT  
CATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTA  
GCATTTGATTTTCTTGTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAACTGAACGTGGACAAG  
AGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATG  
GGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTG

ACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGC  
AGACAAAGACACCCCATTGTGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCC  
CAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGTACCCCGCTCC  
AAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTT  
GGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTLAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGT  
CACCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCC  
CGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAAGACGGTGGAG  
ACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTC  
ACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCA  
AGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCTT  
TCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGA  
GGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCAT  
AGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGNG  
GCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATG  
TCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCC  
TCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTAT  
TCTAGATGTAAAGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCA  
CAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCC  
TCCCATTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTGTCAACTGGGCATA  
GGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGGATCGTATGGACC  
CTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAA  
GTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGG  
GCCGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGA  
AATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATAACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTT  
CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGNCCATTTAAGAACTGATTACAGCTATTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCACAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG

GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACG  
GGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGATAGGGTACAGAGTCACCAAGGTTCCGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTCACGACTTCCCTAGCTATCCGGCTG  
TGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GNCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>S4, London\_17, VIM, 03.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA

CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGCTGTCGACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACANAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCGGGAGGATTAGATACACGTTTCTTGTAGCCCCTATCCTTCCGCATACCAAACAGATTAG  
TCACCCCTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGTTGCGATCCTGTTT  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGTAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTATCTGGCGTCTACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTCTTCTGCTGGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGTGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCTTGTAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA

TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACITTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCGATGGTCCTGTAAAATATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA AAC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGTACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGA ACTATTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGTCACTCATGTCCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCAGTGTGGCCAGGGTGTGTTTGTGTTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTGCCTGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCCGCGTGTATTTGTTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
CATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC

TGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTA ACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCTCGCAGTGGACGTG  
CCCTTGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGC GTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTT CATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTCAAGCTG  
TGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGT NCTCTTCGCCGAGCTAAAGAAACCGGGAGC  
GGCAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCNTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTACACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCTCAACCTTCTCCCCGTTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGTCCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACTTAGTCGGATCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCCGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCCGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGTCTTTTTGAG  
TCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGGCA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA

AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTA CTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGGCAGCCGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACTGAAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCA ACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTT GAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGA ACTTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGT CAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGC GACG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGCCA  
GCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAGAA  
ACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA

TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGC GCGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACG  
GGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAAGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCACT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTGAAGTCTTCAGGTTCCAATGGCT  
GCACATGTATAAATCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCAAGTGGC  
ACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAACCCTTCGAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTAAAAGGTTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGGCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT



TTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCTC  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTGAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTTCTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGACAGGAGGTGTGATGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCCTTGGG

GGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>E5, London\_17, VIM-2, 04.13

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACGTCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GNTCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCTGTCGACTCACG  
AACATTTTTTTCGGCCCCCTTNTCTGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTTCGGTTGTAGTGT

TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCGGAGGAGT  
GGCCTTGACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCC  
NCGCAGGTAATCTCTTCGGTAGTAATGGAGTGCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTACGACCACGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACTGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACG  
CGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCG  
ACCCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTAT  
AAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTCCGCATACCAAACAGATTA  
GTCACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTT  
TCGGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGG  
GTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGC  
TACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTT  
TGGGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTT  
ACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTG  
TCCCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAG  
GTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGG  
GGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGA  
TTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGA  
CAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTC  
GGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTG  
CCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGGACAACACACACTCCGGCGC  
TCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACG  
CCCTAGCCTGCCCTTGTAGCCGTCACTTAAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGT  
GAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGATCC  
TTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCAACCGCCGCATCTTATCGATACCCGCACTGACAT  
CAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGC  
GGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTAT  
TATGCCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCT  
GTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGT  
ATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTG  
TGTAICTGTTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGGAGCGC  
TCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGAC  
CCTTGATTAAAAACCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTCTTGTCTCAGC  
GATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGT  
CGAAATCCCATAATAACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTTACCCCCG  
CCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCCTTACTATGAGTAA  
ATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTC  
CACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTAC  
TCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTT  
AGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
CTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTTCGTCCCCAGACTAGGTTAG

GAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATT  
AAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCCTCCTCCG  
TACGGGAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTGCATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCAATCATGTCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTTCCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTAGTAGCTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGTACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGCTCTGTTAGGCTGTTGGGAGTGCATGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACACCAGGTTGCGTGACGGTCCGGTCCCTCAGTACCCTTCTAGTACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGGAGGTGATGTCCATGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA

TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGCTACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTTAGCGTGTCTGGCTAGTAAAGTGGCCT  
GCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCSCGAC  
AACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATACACTACCCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTANGNATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCACTCGGGCCCCTATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCANATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA

GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACTGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTTTGTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCTATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTC AATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAAGGACTTT  
AATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGCG

TCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACACTGACTATCA  
TGCGAGGGGGAGGCNATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAG  
CATTTGATTTTCTTTGCTTAGGCACCTCGTAGTGGGACTGATCGAAACGAACGAAACTGAACGTGGACAAGA  
GAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGG  
GGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGA  
CGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCA  
GACAAAGACACCCCATTTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCC  
AATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCA  
AGTGCGACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGACGATTCAGAAGTTTGGGAGGAGCTCTTG  
GCATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAA  
GGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGG  
GGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTC  
ACCATAAGCAGGGAACCTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCC  
GCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA  
CGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAA  
GCATCAAGGACCTGGCACCCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTC  
GCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGG  
CGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCT  
CTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTCTGAGTTGTGACGGGGAGGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTTATGGA  
GCCGCTCAATAGCGGGCTTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGGCCGAGAAAGGGAAGGGACGTTATGATACCTTACC

CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCGACGACGTTTGGCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCCGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTAATAACGNGCAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGA  
GGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGCAAGTCGCCGTAAAGTTTTCTGTGCGACAA  
AGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTT  
GGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGC  
AGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATT  
TCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTA  
ACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCGGATA  
AGATACCCGCAAAGAGTGCATAAAG

>P28, London\_17, 02.11

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCCGGCGCTTGTCCCACC  
GCCCTACTCGGTNCGGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
NTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT



GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCTCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTANACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCCTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGNNGGTCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGNGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGNGAGGCGGGCGCATCACGGGTGCGGAGGAG  
TGGCCTTGTACTAGGGCGCCCACACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCC  
TCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGC GCAATTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAATATGCCTTTAGTAGCCCCCAGCTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACC GCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGCGTACGATTGCTAAGATATCCATTACG  
CGCTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCG  
ACCCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTAT  
AAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGTAGCCCCCTATCCTTTCCGCATACCAAACAGATTA  
GTCACCCCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTT  
TCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGG  
GTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGTAGGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGC  
TACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTT  
TGGGTCTCCTTCATATCATTTATCTGGCGTCTACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTT  
ACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTG  
TCCCTAATAGATGTA CTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGT CAGATGTTAG  
GTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGTGG

GGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGA  
TTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGA  
CAATACCGAAGCCTTGAGCTAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTC  
GGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTG  
CCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCCCTCGCGACAACACACACTCCGGCGC  
TCATTGCGGCGTGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTTTGATTTGTACCCAACG  
CCCTAGCCTGCCCTTTGTAGCCGTCACITTAATCCTGAGGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGT  
GAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGATCC  
TTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACAT  
CAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGGATTTGCTCCCTACGGTAACGC  
GGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTAT  
TATGCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCT  
GTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGTGCCCCGGCCTTACTAGCCTGCATAGCTAGT  
ATCTGGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTTCCCACTGTGCCACTGACTTTTACGACGGTTG  
TGACTCGTGGATGCCTATCGTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCGAGCGC  
TCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGAC  
CCTTGATTAAAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTCAGC  
GATNCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGT  
CGAAATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCG  
CCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGTTCCCTCCCTTACTATGAGTAA  
ATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTTC  
CACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTAC  
TCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTT  
AGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
CTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGTTTTCTGTTTCGTTCCCCAGACTAGGTTAG  
GAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATT  
AAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGTACCCACACAGGGGAAGTCTCCTCCCG  
TACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCNCTCCAGTCTCGAATCTCCCGGTCATCATGTCCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCCCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATNCATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTNTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT

CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCCAGCGGCGTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCCTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGNCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCAT  
CCGCGTGCTCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTT  
CCGCTCTGCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATC  
GAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCNAAACATCCAATGATG  
CTTTAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAG  
TGGACGTGCCCTTGCNCACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTCACAACATCAC  
CATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGG  
GAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGCTATTAAG  
CTTCCTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAG  
GTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGNGGTTCCGGCCTGGTGTCTTCCGCGAGCTAAAGNAA  
CCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAA  
CGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCA  
CCTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGNCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCATGATTACGTGTACGTGCC  
CCTCGCCATGTGCGATTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACA  
AAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATAT  
TTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGG  
CTCTAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAA  
GGCTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGTGTCTAC  
ATCCATNGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGCACCAGGGATT  
GCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGC  
GATAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTAATAACCTATAAGTCAGGCTTNGTNACTGGTGA  
ACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCG  
GTTTTTGCCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAG  
CCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGA  
GTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCNATAACGTTCCCGATATTGAG  
CGCTTAACTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGC  
GAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGTGGCTAGTAAAGTGGCC  
TGCGAACGTCAGATGGGCCGCGCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATG  
CACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGT  
GGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCA  
CATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGNACTCGGGTTGGGGATCTTCTCTACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCACNGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTTAAAAGGGTGGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGNGACCGGACATAGCCATTCAATGGGCTCTCTCGTTC  
AGGGCTCCGTACAGTTGGNGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGNCCC

GACGANNNATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCG  
ACAACGAGGGCGACTGTGTGCGAGTAGATNAGGCNGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCG  
GCGCAGTGCTACATGTCACCATAGGCAACCCGNNTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAG  
CAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGAT  
GAGGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCT  
GGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAG  
TAGTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTA  
GTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACTAC  
CCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTC  
GTACGGTGTATGTGACTGGGCCGCTTATCTGGGCGACTNNGNNTGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGAC  
CAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTAGCGCCATAACC  
CCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAG  
AGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCCTTCG  
CCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCTC  
TCTGGGTTGTGCGCTTGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCGACCGGG  
CAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTC  
ATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCANGCTGCGAGTACTAC  
CGCTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGT  
CCCCGTCTAAGGNCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGAT  
CGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCC  
GATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGC  
AGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAA  
TAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCA  
GGTATCGTTCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAG  
CGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGA  
GGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACG  
GCGGGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATNTGGCTGTTACAGCCTGG  
CCGTATACTTAAGTTTACAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAA  
ATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAG  
GAGCCGTAATAACCAACAGTAGAAAAACGACCTAGNNGCAACCCGGGACAATNAATTGACAAGGGGAAAAA  
GCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCG  
AATGAACGACGAGACCCCGTGAACCTTCGGTAGCGAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGA  
AGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTT  
AAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATA  
CGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAA  
TCGCGGGTGTATGCCCTGTGAAGGAGATGAGGAAGGAACAGCGAGCNGGCTATCAGTTGAAGTTATAGGTC  
AGGCTCGGGCCGTAGNGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAANACCGGTGAGGAGCGCTG  
TAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGAT  
GAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAANAACA  
CGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAG  
GTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGT  
CCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCC  
GGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGNACTCCGACTGACA  
GCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTNTGTGTT

CACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAG  
GCGACGCAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAA  
TCCGATGCCGTTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGT  
CCAATTAGGTCTTACACCCTGCCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTGTTTACAGCCAGTAA  
TACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAAAACGGTAGGCGAGG  
AACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCA  
AACNTCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCT  
ATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAA  
GCTGCCGATTGCCGCTGCTAGGCGGAAGTGGCGGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAG  
GGCCAATACCCAGCTAGAGGTGCAAAGCGCTACGGTTCAGTCAAATACCCCTAAGACCAATTTTAAA  
AGCCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAA  
AGCTGGCGAAAAGGCGGTGACAAATTTGCGCCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGG  
CAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGA  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGG  
CCTTCTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCT  
GGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAAT  
TCATGCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGT  
ATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACGCCACGTAGCA  
GAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCNATTGACCAAGTATGATGCCACAGCGTA  
CAGCGAGAGCAGCGTNATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTT  
AGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTG  
CCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTCAACGCCGAACCTGACGAATAAA  
ACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGT  
GAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGT  
TATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATCCGGCAACCGTAATCCCGA  
CAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAT  
GACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTG  
CGCTAGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTG  
GACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGNAAGGCGGTCATGATAG  
TATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATG  
AAATTGACGAAGCTCATTGGGACAAATATGNNGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAG  
ACACGCAGACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTC  
AGGTTCCAATGGCTGCACATGTATAATTCGAAAGAAGCTAGTTCCAGGGAAACCGCAAGAAAACAGCTACC  
CCGCTCCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGG  
AGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAAT  
GTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACAT  
TCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGA  
AGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATC  
ATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGAC  
GGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGGCGAGGGTTGCACGAAGGAAGACTGG  
GAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGCCTAAGAACGAGCCCAGGATGGGAC  
TCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTC  
ATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTT  
AGCAGGAGGGGGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAA  
AGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGGCGACTCATCTGGCACCTCTAGCCCCAATGG

CGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGT  
AAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGAT  
GAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAG  
CCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGC  
TGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAG  
GCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGCAACT  
GGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGGAAGTGGAGATACAAGGATCGT  
ATGGACCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGA  
AGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAA  
AGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACC  
GAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGA  
GGAGTAGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGT  
GTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGNNNATGGTACCTGGTAAA  
CTACAGGTCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAC  
AACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATC  
CGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATAC  
ACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTAT  
ACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAA  
GTCCGAGGCGGTCAAACGTCTCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCTCTGTAATGAGGA  
GTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGC  
CCAATTTTTCGCAAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGA  
GCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATT  
TTTCATGGAGCCGCTCAATAGCGGGCTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGG  
CCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAG  
GCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATG  
ATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGA  
TACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGA  
CGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGT  
TGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCC  
TCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTNCTATAANNGAGAAGTGGTCACTCTAGCTGAAGATAC  
CACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTG  
ATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTA  
CTCCGACGGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTT  
TCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAA  
TCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACC  
TAACAGCAGACATTGTCGGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGA  
GACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGT  
CGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAG  
CGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTT  
CGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATNCGTCAGCATCAAAG  
CCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGCT  
ATCCGGCTGCGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTATAGGGTAGCG  
TCAAAGGCCGCTAAATGTTATACACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGC  
AATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGC  
TGTATCCGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCTGCGAAC

GAAGTAGACGGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGNCTTTGGGCTGCTCTG  
GACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAGAGGAGCT  
CCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGA  
AATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTG  
TCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCCAACCAT  
GCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCAC  
GCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATG  
GTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACC  
TAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGGTCCCTCAGGGCAAGCATCGTGCTACCAG  
CCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P7, London\_17, VIM, 06.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTNAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTCCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATG  
TGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGCCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTGCCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTG  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACTT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCA  
GCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATNTTCCATGCCCTGCGGTT  
GCTCGTCAACCAATTATCTCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGAC

CAGCCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTCTGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCA  
CGAGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCGCGTTTGCCTTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCTCGTCCGTGACTC  
ACGAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCA  
TATGANCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTG  
ACGATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGG  
AGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCC  
TCCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTT  
AGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTA  
CGCGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCAC  
CGACCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACAGTTCCTTTCGAGCCCCTATCCTTTCCGCATACCAAACAGA  
TTAGTCACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTTCGCATCCT  
GTTTCGGTTCCTTGTAAACAACAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCCCTCTTCAGGTTCTTCGTGCCCCGTTTGG  
TTTGGGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGC  
TGTCCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTTCGGCGTCTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTNCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCGCCTTGAC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTGTTCGATCANCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGT  
TCCTTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCT  
AGTATCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACACTGTGCCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATNGAGGGGGTGCAG  
CGCTCGGCCGACCAGGGCCACCCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATT  
GACCCTTGATTAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCGGGTGAGCGGTGGCCACGCATCTACCAAGTTTTGTACAGATCCGTT  
ATGTCGAAATCCCATAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACC  
CCCGCCGTGCCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCTCCCTTACTATGA



GTAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGCACGGATCTTAGCTGTGCCCTTCT  
CTTCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTGGTTTC  
CTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCCCCAGACTAGG  
TTAGGAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGANCA  
CATTAAACCGCTGGGTAAGGCGCAACTTTCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTA  
TACGCGCCCCGCTGGGCCCTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACT  
ACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTA  
CCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATT  
CCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGT  
CACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTC  
CGTACGGGAGAAGAAGTATTTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCAC  
ACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTTCATCATGTC  
CTCTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCG  
AGTGTACAGCCGGAGCGTGTTCCTGTATCANGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTG  
TCCGGACAACACTCAAAGTGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTTCNGATGACTCGTTTGAC  
TGTAGGCCCTCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCCTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTTCCTGACCTCCATCCAGATCATTTC  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTGTAGTCTCATATCGTTCGTTGAGCGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGNAGGTGTGCGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGACTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACNCTCGCAGT  
GGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCCTGGTCTTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTNGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTACAC  
CTCACCCCGGTGCGGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTATTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCCGCTCCTCAGTCACCTTCTAGTCACTGAGTACGATATT

TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCNAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTTATGGCTCCGGTCTGAGCGCGTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TANAACGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCAGTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCT  
GCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCAC  
ATGACATTCCGCCACAAGNTNTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTNGAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTGCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGCAGC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCANNTGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGCGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTANCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCC  
TGACNATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTC  
TGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCA  
TATAATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
GCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC

GGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCG  
ATTCAAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCGAG  
GTATCGTTCCTATCGCACATGGCCGACTTCACCATTATGTCCACAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC  
GGGGATAATAGGTGTAGGAGCGACAAGCCAANTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAT  
ATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAA  
GTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATC  
GCGGGTGTATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAG  
GCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTA  
GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGA  
GGAGTGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACANG  
GAGAGGGTGGGACGGGTGGCGTTTCTGGGTAACAAGGAAGGGNGCGCTCGAGCGGTCCATGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGACATAGATTAACACAGTCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTAC  
GGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCG  
ACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGGTTTCGTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAGTGGAGCAAAACGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAC  
ATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAANACCAATTTTAAAAGCC  
ATTATTTGGTAGNCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG  
AAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA  
AGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCCGTATGA  
GAGCCACGGGGGAATCCTCGCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGC  
AAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT

AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCT  
AGCATTTGATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTACTGATCGAAACGAACGAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATAT  
GGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACG  
CAGACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTT  
CCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTC  
CAAGTGCAGCCACGTTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTTGGGAGGAGCTCTT  
GGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGT  
CACCATAAGCAGGGAACCTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCC  
CGCAGGGGGGAAAAGTTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAG  
ACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTC  
ACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCA  
AGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTATAACCTT  
TCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGA  
GGGGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCAT  
AGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTG  
GCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATG  
TCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCC  
TCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTAT  
TCTAGATGTAAAGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCA  
CAGGAGACGTTGACGCCCGAGCGGTCTGATGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCC  
TCCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATA  
GGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAAAGGATCGTATGGACC  
CTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAA  
GTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGG  
GCCGTCTNGCCCTTACTCATGGCCCAACAGTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGA  
AATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCG  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGAAATACAAGCAATGTTTCCAGTTTCCGATAAAGCCCCAACGATGATGGCTGACAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAANTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT

CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACCGGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCAAACCTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGGCGGTGTCGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTTCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTTGTGATGAGGCTGCGAACGAAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTAATAACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACANACGGTCAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGTTCGGTCTTACAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P15, London\_17, VIM, 02.10

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACNAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACNGGCCTTGAGTGAACAG

AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCANTCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCCATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACCGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGNGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTTCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCNACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTTACTTCCGCGNACGATTGCTAAGATATCCATTACGC  
GCTGTGCTGCACTACAGGATACGGNTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGA  
CCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTTGTCTAC  
CTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCGGGAGGATTAGATACAGTTTCTTGTAGCCCTATCCTTTCGCATACCAAACAGATTAG  
TCACCCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTNGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT

ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTACTNCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCNTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCAACCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTTCGAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAAACCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCATAATAACAGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGTTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGNAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTCCCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTNNTTGGACCCCGAGGGGTCCCGACGTACCTTACNNACCT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTNGCCACCTGGACTTGAGTCACGAC  
CTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACG  
GGAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTG  
GCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCAATCATGTCCTCTCG  
ACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGT  
CAGCCGGAGCGTGTTCCTGTATNATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCCGG  
ACAACACTCAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAAT  
TTGACCCATCGCTGGGACCACTTATACTACAGTATCCAAAACCGTTTTCTGATGACTCGTTTGACTGTAG  
GCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGT  
CCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCG

TGCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAGCCG  
ATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCA  
GGGTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGG  
CGCTCTGTTTTAGTAGCTTCATATCGTCGTTAGNGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGG  
TAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTT  
TCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGA  
GCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCCTAGTGGCTTACTATTG  
NCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGT  
GCTCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGNAGCGATTTCTTTTACTACAACAATCCGTTCCGNTC  
TGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATAT  
CCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCTCATTAACTGTTCCGAACATCCAATGATGCTTCA  
GGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAGTGGAC  
GTGCCCTTGCNACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGA  
GGATCTGTTATTCGGGCGGCTCTATTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTATAGGANTGACCGCTATTAAGCTTCC  
TTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAA  
GCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCCGAGCTAAAGAAACCGGG  
AGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCNTAGAAT  
AACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTC  
CCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCACCTCA  
CCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCT  
AAACTGCCCTCCGGTGAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCA  
CATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCG  
CCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAA  
GGAACCACCGCAAGTTGCGTGACGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGA  
TAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTT  
TACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATG  
GCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGG  
CAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGA  
ACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTGAACGCTTC  
GGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTTG  
CGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGAC  
GGATCCAGTCGNTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGA  
GCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTT  
AATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAG  
TTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGA  
AACCGCACTCGGCAAGCGNAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGNGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT  
CNCGGTTCGAATATGTTAACTTTGGAGCATGCTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCTCCTGCTCCGTAATCGTAA  
TATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC



CGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTT  
TTGAGTCCGCCC CGACNCCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACG  
GACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAGTTGGCGATCTCATCTGTCTGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGA  
GNCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTN  
CCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTNGAATCTGTACCGCTATTCTGGATAG  
GAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGNTGATCAGTAGCTA  
CCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTAC  
GCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACTACCCCAAC  
ATAGCATGATAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGG  
TGTATGTGTACTGGGCCGCTTATCTGGGCGACTNGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCC  
AGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGGCCGTATTACCAACGACGCAGACCAAAA  
GAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCTGTAACCCCTGTCAGCGCCATACCCCAAA  
GAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCTGTGTACGATTACAAAAGANCC  
TACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCCTG  
ACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTG  
GGTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAAT  
ACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCATAT  
AATAAACGAGACCGGGCCCTACAGTTGTCTGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCT  
ACGTGGCCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCC  
GTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGA  
GTCNCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATT  
CAAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTG  
CAGAAAAAAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAAT  
CCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTA  
TCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAG  
CGAGCGGGAATCNGATCGAATGAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGGGC  
GCTGANAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCGG  
GGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATNTGGCTGTTACAGCCTGGCCGTA  
TACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTT  
AACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCG  
TAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGC  
GTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAA  
CGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGNTGGCGCCATCTGTCCGACCAGAAGGCGC  
TTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGTGAGTGGGGTAAAAACACGGAGA

GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCCTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGNGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGNNCCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGANTGGAGCCGAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGA  
AACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCAGAGTCTGATGGGACAATTCATGCG  
CGCTCGTGCTGCNCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAG  
CCCACGGGGGAATCCTCGCCTGCGTGTGTGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAG  
AAGTTGCTTGAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAG  
AGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTNCGTCTGGCGCGGACAGAAGTAGTTAGCTAAG  
CTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGA  
GTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCA  
GCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGAC  
TTAATAGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAA  
TCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCAGACAGCGGC  
GTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATC  
ATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTA  
GCATTTGATTTTCTTGTAGGCACTTCGTAGTGGTACTGATCNAACGAACGAACTGAACGTGGACAAG  
AGAGATATGCGGACGAGACGAGAAGCGCTNCGGTTGCAAATTCGGCGAAAGGCGGTATGATAGTATATG  
GGGCGGGGTGAGGGAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGC  
AGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTT  
CAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCC  
AAGTGCANACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTT  
GGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTG  
TCACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACC  
CCGNAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGG  
GACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAG

TCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGC  
AAGCATCAAGGACCTGGCANCCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCC  
TTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGG  
AGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCA  
TAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGT  
GGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAAT  
GTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGC  
CTCTGGCGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTA  
TTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCC  
ACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCC  
CTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCAT  
AGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATNCAAGGATCGTATGGAC  
CCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTTCGTGCTTAACCGGTGACGGAAGTTAA  
AGTCTCTGNACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAG  
GGCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGG  
AAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTA  
GGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAAT  
GTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAG  
GTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTA  
ACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCC  
CCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGT  
CCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTG  
ATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGA  
GGCGGTCAAACGTCTCCCCTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGG  
GTGGAGACAGTAGGCAATCAACGCGCTTACGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATT  
TTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGAC  
ACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATG  
GAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGAT  
ATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATC  
TACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTT  
ACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGA  
ATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTC  
GGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCT  
AAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGC  
ATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAA  
GGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGC  
CGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGAC  
GGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTNCCT  
GGATGCGAGACCGATAGTTGTCTGCGTTAGTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGA  
GGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGC  
AGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGC  
AGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAAT  
ACTCTCATGTAAAGAAGAGTCTTACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTAT  
AAATGGGGCGGCGGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCA  
GGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGT

GGNTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGCTATCCGGCT  
GTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTATAGGGTAGCGTCAAAGG  
CCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGG  
CTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCC  
GAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCCTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P14, London\_17, VIM, 01.10

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATNGCCACACCCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTNGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACGAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCANCTTTTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC

GATCTGGATCTCCATTACATTAACGGNNTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATCCGGCCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCT  
CGTACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTTCG  
GGAAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCGCCCCCTCTNCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGT  
GTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCAT  
ATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGA  
CGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCACAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCNACTTCGCCGNACGATTGCTAAGATATCCATTA  
CGCGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCAC  
CGACCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCCTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGA  
TTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCT  
GTTTCGGTTCCTCTTGTAAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCTTGCCTTCGTCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGG  
TTTGGGTCTCCTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGC  
TGTCCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTT  
AGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTA  
TCCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATAACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCT  
AGTATCTGGGGTGAGCAGCGGCCTCGTCCCGGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAG

CGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATT  
GACCCTTGATTA AAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTT  
ATGTCGAAATCCCATTAATACACGTA AACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCC  
CCCGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTTCCCTCCCTTACTATGA  
GTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCCGGCACGGATCTTAGCTGTGCCCTTCT  
CTTTCCACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTGGTTTT  
CTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAANGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTCTGTTCCCGACTAGG  
TTAGGAACCTATCCAGTACCTCTTCCGTA AACTCGCTGGTGTGCTGCTCCCTGCCAACTATTGTAATGGCGAGCA  
CATTAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTA  
TACGCGCCCCGCTGGGCCCGTCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACT  
ACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTGACCCCGAGGGGTCCCGACGTACCTTA  
CCCACCTTAAGGCCATAGCTGTGCNNCTTAAATCCNGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATT  
CCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGT  
CACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTC  
CGTACGGGAGAAGA AACTATTTTCATGTTTCGCCGTATCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCAC  
ACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTC  
CTCTGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCG  
AGTGTACAGCCGGAGCGTGTTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTG  
TCCGGACAACACTCAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTAAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTT  
NGNTCTGCTCCTCCTAGTCTGCGTCTGTGGATNCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATC  
GAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATG  
CTTTCAGGTCACTACGCGCTCCCGGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAG  
TGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTACAACATCAC  
CATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGG  
GAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAG  
CTTCCTTACATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAG  
GTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAA  
CCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGNGGCTAGTCGACTCCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGNGGGTCTGTGGAGGAAGACCTCCCATTACAACAA  
CGGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTCA

CCTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCTCGCCCATGTGCGATTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACA  
AAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCTNCCTCAGTCACCCCTTAGTCACTGAGTACGATAT  
TTGGATAGTTCATAGGCATGTATNACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGG  
CTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAA  
GGCTTTTTANTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTATGGCTCCGGTCTGAGCGCGCTGTCTAC  
ATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGGCCTATACAGAAAGCTGGGGGCACCAGGGATT  
GCACGGCAGCGGAGGTGATGTCCNNGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGC  
GATAGAAGTGAAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTGTCACTGGTGA  
ACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCGGGC  
GTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAG  
CCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCGAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGA  
GTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAG  
CGCTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGC  
GAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGTGGCTAGTAAAGTGGCC  
TGCGAACGTCAGATGGGCCGCGCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATG  
CACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCNCGTGTCTCATTGGCATTGGGT  
GGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCA  
CATGACATTCCGCCACAAGCTCTGCCACTGCGGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTNGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGGTCCCGGGGCGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGGCAA  
CCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGAC  
AACGAGGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGA  
GGTTGCCCCGAGACCAACGNCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACCTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCGCGAGTCGGGCCGCTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGNNGTTCGCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTNTC

TGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCACCAGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCA  
TATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGNTGCGAGTACTACC  
GCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCG  
ATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAG  
GTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGTGACAGCCATCCACTNCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCGTGAACTTCGGTAGCGAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAA  
GTCAGCGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGCCNCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATC  
GCGGGTGTATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAG  
GCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTA  
GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGA  
GGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAGC  
GAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAAGTTGGCGAGGACCTTGTGTGTTAC  
GGTGGTGGCCAACTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCG  
ACGCAAAAGAAACCAGACCCCCAGTACTGGTCCGNGTTTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTCTTACAGCAGGGGGGACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTNCAAGCGGTTTCGTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAC  
ATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCC  
ATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGNNTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG  
AAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGNGAGTTACACCGGGAGGGAATGGAGCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA



AGAACTTTAGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGA  
GAGCCACGGGGGAATCCTCGCTGCGTGTGTGGGCGGGTGGTCCATCCCGAACGCCACGTAGCAGAGC  
AAGAAGTTGCTTGAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT  
AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTNGACGGCAAGGGTTAGGGTCTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCT  
AGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATAT  
GGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACG  
CAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTT  
CCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAACCGCAAGAAAACAGCTACCCCGCTC  
CAAGTGCAGCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTT  
GGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTG  
TCACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACC  
CCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGA  
GACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAG  
TCACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGC  
AAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAACCC  
TTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGG  
AGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTAAAAGGTCA  
TAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGT  
GGCGAGTCCAGTAGTCTCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAAT  
GTCACACGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGC  
CTCTGGCGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGNCTGATTGGTAACGGAGCCTGTA  
TTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCC  
ACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCC  
CTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCAT  
AGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGAC  
CCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAA  
AGTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAG  
GGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGG  
AAATTTTCTCGGGCGGTTACCTAAAGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTA  
GGGAATAAGTTTACCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAAT  
GTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAG  
GTCCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTA  
ACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCC

CCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATNCACAGGT  
CCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTG  
ATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGA  
GGCGGTCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGG  
GTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATT  
TTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGAC  
ACTGGGTCTAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTCATG  
GAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGCAT  
ATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATC  
TACTTCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTT  
ACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGA  
ATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTC  
GGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCT  
AAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCNGGC  
ATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACACGCAA  
GGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTACAAACTGATGGAG  
CCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGA  
CGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCC  
TGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAG  
AGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAG  
CAGACATTGTGCGGCTCCGCAGGGCCGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCGAG  
CAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGAAAA  
TACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTA  
TAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTTAGGGTACAGAGTCACCAAGGTTCCGATC  
AGGCAACCAGGTCAAAGACGTCACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACG  
TGGGTGCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTCACGACTTCCCTAGCTATCCGGC  
TGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAG  
GCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTG  
GCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTANC  
CGAATACGACCTTACACGGTTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCTGCGAACGAAGTA  
GACGGTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCGGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCAGCATGGTATGT  
ATTTCTCGAGGTGACAAACGNTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGATGTACACAATAGCGAATGGTGGGTTCGTTNCTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P13, London\_14, VIM-2, 12.09

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAAGTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA

ACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCAAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
NTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCCGGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGGC  
CTGTCGTGCACTACAGGATACGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC

TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTAATAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCGAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCGTCGCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCACTGGACTTGAGTACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTACG

CCGGAGCGTGTTTCCTGTATCATNCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTTGGCCAGGGTGTTTTGTTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGTATTCCGTGCTACCTTACTCACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTCAAGCTG  
TGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTTTCGCCGAGCTAAAGNAACCGGGAGC  
GGCAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAACA  
CGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCGG  
AAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTCACTCACCCC  
GGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAAC  
TGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACATT  
CCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTATGGCTCCGGTCCGAGCGGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTGTTGCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTCC

GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTGTCTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTACAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGCGACAACGAGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTCGAACGGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCGAGTCGGGCCCCGATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGTCAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCTGATAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTNGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGC  
CCATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAG  
GCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCT  
TCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGA  
ACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAA  
AAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCACCAG  
CTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCC  
TATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGG  
GAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACA  
GCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAAT  
AGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTT  
AAGTTCAGATCGTGACCAAGAGCCCCGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCC  
ACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATA  
ACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCC  
GCCGATCAATTGCCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACG  
AGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGAT  
GTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGAC  
CAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCC

TCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATG  
CCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCC  
TAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACT  
AATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCGAC  
GGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTG  
GGACGGGTGGCGTTCCTGGGTAAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
GTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGT  
GACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACC  
GCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAG  
TATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCC  
AGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAG  
AACCAGACCCCCAGTGAAGTGGTCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCC  
TTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTA  
CACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACCTGCAGACGG  
ATTGCGCAGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAACCGTAGGCGAGGAACAAAGTTAGCT  
ATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGG  
GAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACG  
GGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGTGCCGGATTG  
CCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCC  
AGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTG  
GTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAA  
GGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAG  
GCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGGAATGGAGCCCAGAACATGGCTATTA  
TGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGCAT  
CAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGGCGTGCAGCCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCAGACGGCGTCAAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAAGTGTTCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGGC  
ACCACGTTTGGTGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT

GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGC  
GACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCTTCGTGGTAACTGTACCCAGGATCCTTCTCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACCCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGACGGTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
ATCCCTCAAATCCGCACGCAGGTTACCCCGCGCGCCGACTCTTGTTATTACGATCTTCTGCCTGGATGC  
GAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA



TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGCCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCACTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P27, Wales\_1, VIM-2, 02.11

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCNCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCAATAAAGTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAAGTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTCAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG

CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATNTCAACTTGT  
TTTACCCTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
TAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCC  
ACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGC  
CGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTTAGTTTAAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGGTGCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCT  
CGTACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGCCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGACTGGTGC GCGTTTTGCCTTGC  
GGAAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGC GAGTTCCCGTCCGTGACTCAC  
GAACATTTTTCGGCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCCGTTAGTAATGGAGTGTCCGGTGC GATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGTTAGTCAATTCTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATANGCTATTTGTGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTTCCGGGGCTGTC  
CCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC

AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTTCACACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA AAC  
GCTGGGTAAAGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGTACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGA ACTATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCCTCCTTATCCCCCTCAGTCTCGAATCTCCCGGTCATCATGTCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTGAAAAGTCGTGTGCGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTTTTTGTCTGACCTCCATCCAGATCATTCCAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCCGGCCGGTCTGTTAGGCTGTTGGGAGTGC GTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTT CATAGGATTGACCGCTATTAAGCTTCTTCA

TACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTCTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGATGTGACTGCGGGTATGTGCCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGCCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTCCGGCTTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCNNGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGTTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTNNGACTCCCTATTGTGCTACTGCGGGCCCTTCTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGNCTCTCACGTGTAATAACCTATAAGTCAGGCTTTGCTACTGGTGAACGCTTCG  
GGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGTTTTTGC  
GCAATTCTACGGGACGCACCGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACG  
GATCCAGTCGTCTAACCGGATTTTAGTTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAG  
CCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTAA  
ATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGT  
TGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGA  
AACCGCACTCGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT  
CCCGGTTCGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAICTGTA  
TATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC  
CGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAAATCCCGGACGCGGGTATCAACAGCCGACGGTCTT  
TTGAGTCCGCCCAGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTCCGCAACCGACG  
GACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAATTGGCGATCTCATCTGTGCGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGGAAGAGTAGGGTGTAAAGGGGTTCCACCGCGACAACGA  
GGGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGTAGGTTCCACGCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC

GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCCGTATTACCAACGACGCAGACCAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTT  
GTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACA  
GGGACAAACACACGGACTCCACGCCGCCTTTTTGACACTGAATCGCGACCTACTTGCCCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
TGCCCCACTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAAC  
GCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAA  
ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCG  
ATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGG  
ACCAAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACG  
CCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGA  
TGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGC  
CGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGA  
CTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGC  
ACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGT  
GGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
AGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCG  
TGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAAC  
CGCGAAGAGGGGTACCGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAA  
GTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGC  
CAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAG  
AAACCAGACCCCAAGTACTGGTGGCGTGTGTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTT  
GTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTT  
ACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACG  
GATTGCGCACGCTTTGTATCATGCCGTCCGGCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGC  
TATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCNATTTTAAAAGCCATTATTT

GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCCCGAGACCGAGGCTGTGTGTAAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATT  
ATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGC  
ATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCAGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCA  
CGGGGAATCCTCGCCTGCGTGTGGGGCGGGTGGTTCCATCCCGAACGCCACGTAGCAGAGCAAGAAGT  
TGCTTGTAACTGACTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTAAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATCCGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
TGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAAATCGGCGAAAGGCGGTCATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA  
GCTCATGGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAGAC  
AAAGACACCCCATGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATG  
GCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCAGAAAGTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATAAGGATGGTGTCTAACAGCAATGTCCTAAGGCC  
AGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGG  
TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCA  
TAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGGCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCG  
AGTCCANGAGTCTCCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTTGAAGTGTGCAACAAAAGGATATGTATGCCACTTCCCGGATGAGAGCCTCT  
GGCGACGCCCCGAGGAAACCATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGAAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAAAGGATCGTATGGACCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA

TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTTTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACAGGGAAAGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
GCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCCCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAGAGGGGGACCAGCAGACGTTTGCCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTAATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGATCAGGC  
AACCAAGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P57, South East\_3, VIM-2, 09.13

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTGTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGGAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACCGTGGCGCAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCCGAGGA  
GTGGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTAC



CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTGTCT  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCTAATAGATGTAAGTGCATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTTCGATCATNACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGT  
GTGACTCGTGGATGCCTATCGCTTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATTAAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCC  
CGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC

CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCTCCTCCG  
TACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTTCGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTTCATCATGTCCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGGTCTGACCTCCATCCAGATCATT  
AGCCGANACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCTTA  
CTATTGNCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCAT  
CCGCGTGCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATC  
GAATATCCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATG  
CTTTAGGTACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAG  
TGGACGTGCCCTTGCNACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCAC  
CATGAGGATCTGTTATTCGGGCCGCTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGG  
GAGNATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGTTCATAGGATTGACCGCTATTAAG  
CTTCCTCATAACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAG  
GTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTCTTCGCCGAGCTAAAGAAA  
CCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTGCAGTCTCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGCGGGTCTGTGGAGGAAGACCTCCATTACAACAA  
CGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTCA  
CCTACCCCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACA  
AAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATAT  
TTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGG  
CTCTAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAAGATAATCTTTTCAA  
GGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTAC  
ATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGACACAGGGATT  
GCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGC  
GATAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGACTAACCTATAAGTCAGGCTTTGTCACTGGTGA  
ACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GTTTTTGCGAATTCTACGGGACGCACCGCGTTGTGACCGTTGACCCATGATGGGGAAAGCACGGCCTAG  
CCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGA  
GTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAG

CGCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGC  
GAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGCC  
TGCGAACGTCAGATGGGCCGCGCACTGCAACTAATGTCCTAATCTGACGTTGGGCTTCTCAGAGCCCAATG  
CACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGT  
GGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCA  
CATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCGACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAANCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCGNGACNCCGTGGCGNGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCA  
ACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGNT  
CAGGGCTCCGTACAGTTGGCGATCTCATCTGTCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCC  
GACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAGAGTAGGGTGCTAAGGGGGTTCCACCGCG  
ACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCG  
GCGCAGTGCTACATGTCACCATAGGCAACCCGTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAG  
CAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGAT  
GAGGTTGCCCAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTGAATCTGTACCGCTATTCT  
GGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAG  
TAGTACCGGGTACGCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTA  
GTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTATACACTAC  
CCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTC  
GTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGAC  
CAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGTTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCC  
CCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTGTGTACGATTACAAAG  
AGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCCTCG  
CCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAAATCATGTCCAGTATACCCTCCTTTGTTCTC  
TCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAANCCAGGCGACCGG  
GCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGGCCGATGT  
CATATAATAAAAACGAGACCGGGCCCTACAGTTGTGCTGAAATGGACTTATACTCGACCAGCTGCGAGTACTA  
CCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAG  
TCCCCGTAAAGCCTTCAAGTTGACCGGTCAAAGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGA  
TCGGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCC  
CGATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATG  
CAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCA  
ATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGC  
AGGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTA  
GCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTG  
AGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAAC  
GGCGGGGATAATAGGTGTAGGAGTGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTG  
GCCGTATACACTTAAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATA  
AATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA

GGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCCTGCGCATTAGAGCATGTGGACCC  
GAATGAACGACGAGACCCCGTGAATTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAG  
AAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCCGCGCTT  
TAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTGTACAGTTAATAATGACAACGCCAGAGCTGGAT  
ACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGA  
ATCGCGGGTGTATGCCCTGTGAGGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGT  
CAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCT  
GTAGAGGAAGACTAATTCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGA  
TGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAAC  
ACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCA  
GGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGACATAGATTAACACAGTGCCGCCAGGGG  
TCCGTAGGTGCGTGACCTACAGCGAGAAGATCCGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTC  
CGGACACGAAACCCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGGATGCTCAAGAGACTCCGACTGACA  
GCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
CACGGTGGTGGCCAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAG  
GCGACGCAAAGAAACCAGACCCCAAGTACTGGTGCCTGTTTTGGGGTCCATTAATGAAATACGGACGAA  
TCCGATGCCGTTTCGTTACAGCAGGGGGCACCATCTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGT  
CCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAA  
TACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAAACGGTAGGCGAGG  
AACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCA  
AACATCCGATGGGAGGATACGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCT  
ATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAA  
GCTGCCGATTGCCGCTGTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAG  
GGCCAATACCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAAATCAATACCCCTAAGNCCAATTTTAAA  
AGCCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAA  
AGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGG  
CAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGA  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGG  
CCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCT  
GGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAAT  
TCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGT  
ATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCA  
GAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTA  
CAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTT  
AGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTG  
CCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAA  
ACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGT  
GAGGACTTTAATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGT  
TATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGA  
CAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAT  
GACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTG  
CGCTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAAACTGAACGTG  
GACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAG  
TATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATG

AAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAG  
ACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTACTCTTC  
AGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACC  
CCGCTCCAAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGG  
AGCTCTTGGCATTTC AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAAT  
GTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACAT  
TCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGA  
AGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATC  
ATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGAC  
GGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGG  
GAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGCCTAAGAACGAGCCCAGGATGGGAC  
TCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTC  
ATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTT  
AGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAA  
AGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGG  
CGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGT  
AAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGAT  
GAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAG  
CCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGC  
TGGTCCACAGGAGACGTTNACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAG  
GCAGCCCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACT  
GGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAAAGGATCGT  
ATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGA  
AGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAA  
AGTAGGGCCGTCTAGCCCTACTCATGGCCCAACAGTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCACC  
GAAGGAAATTTTCTCGGGCGGTTACCTAAGGTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGA  
GGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGT  
GTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAA  
CTACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAC  
AACGTAACGATCTGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATC  
CGCCCGCTAAGAAAAGCGATACTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATAC  
ACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTAT  
ACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAG  
GTCCGAGGCGGTCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGA  
GTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGC  
CCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGA  
GCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATT  
TTTCATGGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGG  
CCGCATATTCTGAAGCCTATACGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAG  
GCAATCTACTTCTATTACGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGA  
TACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCAAGTGGAGTGGTACCCAGAT  
ACTGAATTGCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGA  
CGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGT  
TGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCC  
TCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACC

ACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGA  
TGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTAC  
TCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTT  
CTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAAT  
CCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCT  
AACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAG  
ACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTC  
GAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGC  
GCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGAGGGTACAGAGTCACCAAGGTTCC  
GGATCAGGCAACCAGGTCAAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCC  
TTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTCACGACTCCCTAGCTAT  
CCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTC  
AAAGGCCGCCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCA  
ATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCT  
GTATCNGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTGTGATGAGGCTGCGAACG  
AAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGCCCTTTGGGCTGCTCTGG  
ACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTAGAGGAGCTC  
CCGCACTTACTGGCCGTACTATACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAA  
ATCGCGAGGTGATAGTCAGTGCAAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGT  
CGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATG  
CGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACG  
CAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGCGGCTCGGGGTCCCACGCATGG  
TATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCT  
AGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGTCTACCAGC  
CGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P9, East of England\_6, IMP, 08.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCNNCTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGNTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCCTATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA

CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCNTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTTNCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATATTCCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGTGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGCGTACGATTGTTAAGATATCCATTACGCG  
CTGCTGACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTCCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTCCCTCTGAGCCCCTATCCTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTATCTGGCGTCTACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTATC  
CCTAATAGATGNACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCTTCTCGCGACAACACACTCCGGCGCTCA

TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTNAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACITTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACAGCCGATGGTCCTGTAAAATATCGGGACCAACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACGAAATTACCATTGCCCTTA  
TTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTAGGAAC  
CTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGNGCACATTAAC  
CGCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGC  
CCCGCTGGGNCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCT  
CCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCAGGTACCTTACCACC  
TTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGNCTCGCTTCGGGGATTCCCCG  
ACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGNCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGA  
CCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTAC  
GGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTT  
GGCTAGCCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGTCCATCATGTCCTCTC  
GACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTG  
TCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCG  
GACAACACTCAAAGTCTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACA  
ATTTGACCCATCGCTGGGACCACTTATACTACAGTGTCCAAAACCGTTTTCTGATGACTCGTTGACTGT  
AGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAA  
GTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTTGGGCCATCCAGCTGGGATTAGT  
CGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTGAGC  
CGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACGGTCCGCGAGTCTACTC  
CAGGGTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTGTAGTCTCATATCGTCTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCT  
GAGCAGCTGTAGAAGGTGTGCGGTGCGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTAT  
TGCCGTTGGTACGACGACGGCAGGTCTTGGCCCCGGCCATCGCTGGAGCCGCGGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTTCTAATTAGTGCAGTCAAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT



ATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCTCATTAACTGTTCCGAACATCCAATGATGCTTT  
CAGGTCACACTACGCGCTCCGCAAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGG  
ACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACNACATCACCAT  
GAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGCTATTAAGCTT  
CCTTCATAACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTCCCGCTGATTGTGGCTCGGGAACAGGTC  
AAGCTGTAAGGTAGTTGGCTAAGAATTGGANGGAGGTTCCGGCCTGNTGCTCTTCGCCGAGCTAAAGAAACCG  
GGAGCGGCAAATATTGCTTTGTATNTNACTGCGGGTGTATGTCGNCCATGGGGCGNCTAGTCGACTCCTAGA  
ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGG  
TCCCCGAAACCTTGTTAGTCCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTACCT  
CACCCCGGTCCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAAT  
CACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAG  
AAGGAACCACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTACCCTTCTAGTACTGAGTACGATATTTG  
GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGGCTCT  
AGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCAAGGCT  
TTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCA  
TGGCGTCCCTATACCTTAGTCCGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGACACAGGGATTGCACG  
GCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTNTCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGTTTTT  
GCGCAATTCTACGGGACGCACCGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCTAACCAGTTTTAGTTCCGCAAGTGGAAAGTGCCCTGTGAGCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGNCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGTTTGAATATGTTAACTTTGAGCATGCTTTATTCGCACTCGGGTTGGGGATCNNNNNNNNNNNNN  
NN  
TCCGTAICTGTAATATGAACAGCCGGCGTGTCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCA  
AGTAACGACAGAACGAATACCGGCGAGGCTAGTCTGTCTACTATCCTGTAICTCACTCAGCCGAAGACGA  
CGGACAGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGG  
TCAGAACGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCGCCGACGCGGGTATCAACAG  
CCGACGGGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGT  
CGGCAACCGACGGACTGACCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTC  
TCGTTACAGGGTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGC  
GGCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCA  
CCGCAACAACGAGGCGACTGTGTCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGC  
TCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGG  
ACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTC  
GGATGAGGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCT

ATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATG  
ATCAGTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCT  
CCCTAGTCTACACCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACA  
CTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGC  
CTTCGTACGGTGTATGTGTAAGTGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCCTAGTACGTGGGC  
GCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCA  
GACCAAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGCAAGATCGTCGTAACCCCNNGTCAGTGCCATA  
CCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACACA  
AAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCT  
TCGCCCTGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTT  
CCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGAC  
CGGGCAATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGA  
TGTCATATAATAAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTA  
CTACCGCTACGTGGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAA  
GAGTCCCCGTCTAAGGCCTCAAGTTGACCGGTCAAAGTCCGGCGTTGGCTACTAGAGGACCATGCAAGG  
CGATCGGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTG  
TCCCATTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAA  
TGCAGTGCAGAAAAAATAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCAT  
CAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAAC  
GCAGATATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTG  
TAGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAAT  
TGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAA  
CGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCT  
GGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAAT  
AAATATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA  
GGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGCGCCGACCCGGTCTGCGCATTAGAGCATGTGGACCC  
NAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAG  
AAGGCGCTTCGATGTGAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTT  
TAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGAT  
ACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCAGGGAGATGTCTCAAGTCCGGGAGGGCGTCTTAGGA  
ATCGCGGGTGTATGCCCTGTAAAGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGT  
CAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCT  
GTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGA  
TGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAAC  
ACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCA  
GGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGGG  
TCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTC  
CGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACA  
GCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
CACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGACTGACCAAGAAG  
GCGACGCAAAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAA  
TCCGATGCCGTTGTTACAGCAGGGGGGACCATCTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGT  
CCAATTAGGTCTTACACCCTNCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAA  
TACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAAACGGTAGGCGAGG

AACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCA  
AACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCT  
ATGTCATGGATGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAA  
GCTGCCGATTGCCGCTGCTAGGCGTAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAG  
GGCCAATACCCAGCTAGAGGTGCAAAGCGCTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAA  
AGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAA  
AGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGG  
CAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGA  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGG  
CCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCT  
GGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAAT  
TCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGGTACAACGCCGCCGT  
ATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTNGTTCCATCCCGAACCGCCACGTAGCA  
GAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGTGTA  
CAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTT  
AGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTG  
CCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAATAAA  
ACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGT  
GAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGT  
TATAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGA  
CAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAC  
GACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTG  
CGCTAGCATTGATTTTCTTGCNTAGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTG  
GACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAG  
TATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATG  
AAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAG  
ACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTC  
AGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACC  
CCGCTCCAAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGG  
AGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAAT  
GTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACAT  
TCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGA  
AGATTGTCACCATAAGCAGGGAACCTTGTTGTTAGGTAGCGAGGGCCCAAAGGAGAGACCCGGAGTTATC  
ATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGAC  
GGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGA  
GAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGAC  
TCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTC  
ATACTCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTT  
AGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAA  
AGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGG  
CGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGNACGGGCAATGGCCGAGGCACGTTGGGAGT  
AAGAATGTCACATGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGNN  
GAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAG  
CCCGTATTCTAGATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGC  
TGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAG

GCAGCCCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTCCGCGCTTTGCAACT  
GGGCATAGGAGCATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGGATCG  
TATGGACCCTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGG  
AAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATA  
AAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCAC  
CGAAGGAAATTTTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGA  
GGAGTAGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCCAAAGCACCCCTTGT  
GTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAA  
CTACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCCAAAGAGAAAC  
AACGTAACGATCTGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATC  
CGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATAC  
ACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTAT  
ACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAG  
GTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGA  
GTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGC  
CCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGA  
GCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATT  
TTTCATGAAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGG  
CCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAG  
GCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATG  
ATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGA  
TACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGA  
CGACTCAGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCTGTCTGTTTTGCGGTACTAGT  
TGGTCTAAGCACNCCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCC  
TCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACC  
ACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCNAGCGGGACACTACGTTGATGCTCCAACTGA  
TGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGTGGGACGGAAACGAAAAATCTAC  
TCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTT  
CTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAAT  
CCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCT  
AACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCCGACGTTTGCCCCGAGAG  
ACCAGCAGGTGCTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTC  
GAAAATACTCTCATGTAAAGAAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGATATAGGTACAGC  
GCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTT  
GGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCC  
TTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGCTAT  
CCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTC  
AAAGGCCGCCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCA  
ATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTCGTTAACCAAGTAACAACAAGAAAGCTACGCT  
GTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACG  
AAGTAGACGGCTCACTATTCGATGGGTGCCGGGGNCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGG  
ACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAAAGGAGCTC  
CCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAA  
ATCGCGAAGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGT  
CGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATG

CGATCCTTGNNGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCAC  
GCAGCTGCAGGTGGGGGACGAGCGGATTACGCCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATG  
GTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACC  
TAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAG  
CCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P59, Wales\_1, VIM-2, 09.13

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATNTCAACTTGT  
TTTACCCTTACTCAACTTTTAGTTTACGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
TAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCC  
ACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGC  
CGATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTATGTTTAAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCT  
CGTACCACATTCATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCAGGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCCGATTCTGGGTGGGTTGTAGTG

TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGGACACCTCATGTTCTGCCATAT  
GATCTCCNCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGAGGAGT  
GGCCTTGACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTNGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGTTCCTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGTGT  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTTCCTGTCGCCCTTCTCGCGACAACACACTCCGGCGTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCATGGTCTGTAAAATATCGGGACACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGGAGTTCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGNCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGA  
AATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCCG  
TCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTCCCTCCCTTACTATGAGTAAATG  
TACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCCAC  
ATCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTGGGTTTCTTACTCC  
CCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGA  
TTTAAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTA  
TTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTGTCGCCAGACTAGGTTAGGAAC

CTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAAC  
CGCTGGGTAAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGC  
CCCCGCTGGGCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGCAGTACTACGCCTC  
CCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTACCTTACCCACT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCACGACC  
NCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCTCCGTACGG  
GAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACTGAAAAGTCGTGTGGGGTACGACGCCCTCAGTAAGACTCTCGCGTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTTTTTTGTTCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGC  
CTCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCGCCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGCTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATTTTTCAAGGCTTTTTA  
CTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC

TGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGCCACTGCAACTAATGTCTAATCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCACATGACATTC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAAT  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTAC  
AATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGNGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTAAGTGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGTCCGAGTCGGGCCGTATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCATTGCGCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CACTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTACATAAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG



AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAACGCCA  
CGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTANCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTGTTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCAGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCCGACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAATA  
GGCGGAGGTCCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT

TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAGTACTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATGGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATAAGGATGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTA  
GAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAACCCCTCGAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCANGAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTTCTGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACCATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCTTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT

CAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACCGGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCCGCACTCTTGTTATTACGATCTTTCTGCATGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTA  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCCCTCAGGCGAAGCATCGTGCTACCAGACGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P54\_1, London\_24, VIM, 04.13

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATNGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGNCCCGTTGCAAGGAGACGGGCTNNTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTNACTAGCTCTCCCTACTTGCTGAANTTGGCGTTGGA  
NCGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGNATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTNNCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGNCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTNTTGAATGTCTTA  
GACTGTAGCTGGCTCTANCCGACTATCTATTCTGCTGCGCTTNCGCCCCCGGTTTTGCGNCTCTACCGAGC  
TTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTNTCCCATAACTCTCCAACGGGCCNTGAGTGAAC  
AGAGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCCGGCGCTTGTCCCA  
CCGCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATGA  
TCAGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCC  
GGTCAGATGGGTCAAAGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGNNTNTTGGCACGCATGGTC  
CTGTAGCCCAATCCTCTAACGCTCGAGNTAGGGTTAACCGCAAGCAGTNANCTTTGTGTCAGTGAAGGAA

TGTGCACCTANTAGAAGTCAGCATCCGAGCTCCACTGNAGTCCGNTCCTCTCGGTTTCCTCTCGAAGGGTCTTC  
TANGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGNAGACTGCCTTTGAGTCGCGCACT  
GCCTCAGTTTTGCCACCTGCGGTCNTTATAGAGAGCACAAAAATTAGTCGTCTTATGAGANACCGACTAGTA  
TGCCCTATCCGTTTACGATCCGTGCGGATCTTNTCTCACGGACTNCACCTCACTAGTTTTCGTTATNTGGTTCGG  
GTTCTGGCTGCTCTGGCGTNGGTCTAGGGNCCTCTCNCGTGACAACGCTTACGTAGAACCAAGAATGGAAC  
GGACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGNANCCACTTTCCTATTGCCNTATTGG  
TGCATTGGAGAATGACACCCTACACTTCTACCACCNTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAAC  
AAATGTGNGTCTACGCCGGGAGCTAGGCAGATTTTCCCGTTGGGTACGGCGCATNCTTGACCTCAATATCAA  
CCTGCTCGTATGGACATTTCTAGCAGNTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCC  
AATCCNCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATANCCCATCGGGGGTTGATNATAATT  
GCGTGGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGNCCCAATTCTTTCC  
GCTTGTCTACACTATNGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATC  
TCAACNTGTTTTACCANTTACTCNACTTTNAGTTTCAGTAAGGCACCGACNGNTTATAGCCCCGCNCTGCNG  
TCCTGGATCTTTAGATCGNTTTTATCGGGGCACGCAGACCTTAAACATCCTGTGNGTAGGGTGTGACACATCA  
CCAATAGCCCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTT  
NGATACCCAGCCGATCTGGATCTCANTANATNAAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCC  
ATCAGGTTAACTAATTTGGACCCGCCGGCTAANATGAACGCGTTTCTAGACGTTTAGTTTAACTTCCCC  
TGCTGCGAGCTAGGATCTCGCCTCGACGTATTGAACTCCNATGCCATAATTCCGCCCCCTNANATATAGGC  
GTGCCACNGGACTATTTGTGGANATTGCNNCTCTGCNTTTCGCTCACCTTGTGCTATGCCTATNCTCTCCATN  
CCCCNGCGGTTGNTCGTCACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGC  
CTAAGGNTCNACCAGCCGTTGTCCTCCTGCTCACAAGCATTGCACCCGCGGACGANTGTCTGCCTGTTTTACC  
CTCCTCCCGCTATCCTCGATACGCAATGTAGGTGCAACATTCGTTATTTNTGAAGTTANNGCCTGCGTCCCC  
TNATACATCGCCACGAGAGGCCGGTTGATTCAGTATNCAAGCTCTCTACGGTAATTTNTTGTGCCGGACTGGT  
GCGCNTTTGCCTTTGCGGGAACCNATGCTGCAAGNCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGN  
TCCCGTCCGTGACTCACGAACATTTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTAATTNNAAGCCCCGATNC  
TGGGTGCGTTTGTAGTGTATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACA  
NCTCATGTTCTGCNATATGATCTCCCGNATNTAACNCTCCTCAGCTCGCTAAACACTGTGGCACAGTCNGTG  
AGCTNGTATCCCGGTGACGATNCATATAATAGCGTTTCTGTCNNATGTTGCTCCACCTGGTGAGGCGGGCG  
CATCNNGGTNGGAGGAGTGGCCTTGTACTAGGGCGCCCACTCCCAGCTCTGGGACGTNTCATCAATGCG  
GACTGACTCCACGCTCCTCCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATNAGCA  
CGTTACTTNCGGAGGTACCCGTGCTGAGCGCTAGNCACGGTCGTGGCCATCGCNACCTGCAAATATGCCNT  
TCNGTAGCCCCCAGCTCCCTGAGACGGCAGACCCGTGAGNCAGGCCACCGCTTACGTTTAGACCACGGCC  
GAGCGCGTCCNAAGAGTTAGCTTACCNCAAGTTGTGNTTGGTATTGGGGGCGGTCCCTCTACTNCGNCGTAC  
GATTNCTAAGATATCNATTNCGCGCTGTCGTNCACTACAGGATACGGGTCTTCCAGGTGTGNGGGTACATN  
ATTGAGTGTAAANGCTGACCACCGACCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCT  
ATCCCTTGTCTTACTTTTGTCTNNCTCGATATAATAACANNGGGCCGGTAGTCAATTTCTCNATACCGCAA  
ATCGTCANTTAGCTTTGCTAACTTATAAAGGTGCGTNTTCGGGAGGATTAGATACACGTTCTCTTGGACCC  
TATCCTTNCGCATACCNAACAGATTAGTCACCCNTCGTATCGACAGAGACCGANNCCAAATCCAACATCAAG  
TACTATTNNTCCTNGTTCGCATCCTGNTTCGGTTCCTCTTGNAAACACAGATAACNNATNTGTGCGCAACNCC  
ATCCTATAACNACGTANTCGGGATGGGTCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCNGGC  
ACTGCCTACAGATTACTAATGATGGAGCTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCT  
NTTACAGTTCTTCGTGCCCGGTTTGGTTGGGTCTCCTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGC  
NAGGCCACTGCATCCACTATCGTTTTACGAGAGTAATCANTNGNTACACTATTGGGTTGNNNNGCAGCTTC  
TNCCNNGCTGCTCTCGTTTTCCGGGGCTGTCCCTAATAGATGTAATGCTATCAGAGTCTTNTGCTGGTGTCC  
AATCTCATGCACTATGTCGTGAGATGTTAGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAA

CCCTGNGTATCCTCCAANGCGTTTCGNTGGGGCGCTGCGTTAGANCGAACGCTCCCCACTAAACCCTCGAACN  
CAAGCTAGTCTCTCCATTCTAGGNGCGGATTTACCCTTGAGCTTTCAAGNGCTANTCCCGGGGACTNCNNCA  
GCATGAACTTGTTTTAGATGCGGNGTGCGACAATACCGAAGCCTTNAAGCTAAACNNGCAATAAGATTAACGA  
TCTTCCATCACGATTGGTCACTCGCATCGTTCCGGTCTAAACACTATNNGGTTTTTACTCCCTAATGATCGGTCC  
CGTCCGGTATACATTTCTTCCGCTTGGCGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTTCTCGT  
GCCCTTCTCGCGACAACACANNCTCCGGCGCTCATTGCGGCNTGGCCCTNTGGNTTCCGACNCCGCTACNTA  
ANAGTAGGTCAATGTCTGATTTGTACCCAACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGNGNGC  
TNAGCAGCTGTGCGCCAGAGTTNGTACTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATT  
CACCAAATCCGCNATTACTATTGAGTGTATCCNTAATCGTCACGCCGATGGTCTGTAAAACACTATCGGGANCN  
CCNCCGCATCTTATCGATACCCGCACTGACATCAGTGCTTCCCCTGTNCNCCGAGTTTCTGCACAANGCTTGN  
GATCGCCGTCGATTGCTCCCTACGNTAACGCGGCAATACGANCGACCAAATTAAGCNNTGACCAGAGTGG  
CTCCTTCCGTAGTCTCACGANNANNCCATATTATTATGCCTNNGCGCCTCGAGAGANNGCGTGCAGTCCACG  
CCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGATTCTNACNCAGGTGACGGGACGACTGTCACAGAG  
TGATGGCNCCGGCCTTANTAGNCTGCATAGCTAGTATNTGGGGNGAGCANCGGCCCTCGTCCCGGTTTTCT  
GTTTCACACTNNGCNCACTGACGTTTTACGACGTTGTGTAAGTTCGTTGACGCCTATCGTTTTTTCTCATAAG  
TAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGGCCGACCAGGGNCCACCCTCGCNACCNGCTT  
TGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTNCCCTTGATTAACCCCTCAGTGGTAGTGGTNNNCA  
TTCCCGGCCCTCACTCATGTACNGCTCTTGTCTCAGCGNTGCTATTCTNCGTTGCTCCCGGGTGCAGCGGTG  
GCCACGCGATCTACCAAGTTTTGTACAGATCCGNTATGTGAAATCCCCATTAATACAGTAACTACTAGCTT  
ACTGAGTTTCGACCGCGGCTCACGACGTTACCCCCCGCGTCCCACTTGAAGGTGGCGCATCCTCTAC  
AGAGGCTCTGTCTGGGGTTCCTTCTTTACTATGAGTAAANNTACNATTAANCNGTNACGCCATTGGAGGT  
ACGGATTTGNCNNACGGATCTTAGCTGTGCCCTTCTTTCCACATCCCAGATTACCCNAATTCGCGCGAG  
CTTCCCTANNACNNGGCGGACAGAGAATGTCGGTTTTCTNACTCCCCTAGTGGGCGTATCGCGACCACTCAAT  
CGGTATCNTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATA  
AACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCG  
GGTACCTTTNCGCCGTTTCNGTTCGTCCCCAGACTAGGTTAGGAACCNATCNNGTACCTCTCCGTAACCTCGC  
TGGTGTGCGCTNCCCTGCCAACTANTGTAATGGCGAGCACATTAACCGCTGGGTAAGGCGCAANNTGCGGA  
AGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGNCCGCNNGGCCCGTCCCCGGAGNN  
CGNATAGCTCCTCATAACCCTGCAGCCACGNGGCGGTNNTACGCCTCENNNTTTCAGACCNNCTCGTAAATG  
CTGGGGANTNTCCNNTGACCNCNAGGGGNCCNGNNGTACCTTNCNNANNNTAAGGCCATAGCTGTGCGCC  
TTAAATCCGGGTNNTTGTNNNNNNNNNNNAGTNTCGCTTCGGGGNTTCCCCGCACCNNNANGTGTNNNNN  
NNANNNNAAACNNGGCGTGTNTGCGCGNCTTGGCNNCCTNGACTTGANNACGACCTCGATCGGTCAAG  
CGAGGGGTACCCCTGCACATTTNCTCTGACCCACACAGGGGAAGTCCNCCTCCGTACGGGNGAAGAAGTAN  
TTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCTAACCGCTCGAA  
TNANGCNCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATTATGTCCTCTCGACNCCNGGCTTCTA  
GACNATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAGCCGGAGCGTG  
TTTCTGTATCATNCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTNGTCCGGACAACACTCAAAA  
GTCGTGTGCGGGTACGACNCCCCTCAGTAAGACTCTCGCGCTTGTAGANGGGNAACAATTNGACCCATNGC  
TGGGACCACTTATTACTACAGTGTATCCAAANCCGGTNTTCTNATGACTCGTTTGACTGNANGCCTCCTTCTAC  
CTGCGCTCNGACTCTNGGAGGAGTCTCCTANNCTACATNNTTGNNGATAAACNAGTCAAGTCCGAGCGAG  
CCAGCATCCTAANTGCTGNAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTNCCCGTGA  
GGCTTNTTNCNCGNNGTGTGGCCAGGGTGTGTTGTTCTGACNTCCNTCCAGATCATTAGCCGATANATTG  
AGTGGGNCTCTCAACGCGCNAGGGGACCTTNCCTATTTGGTGATACAGTCCGCAGTCTANTCCAGGGTATTT  
GGACCATCAAGTGCNCNTCANNAANAATAACANAACACCCCCAAGCGCCTGTGTGTAGTGGGCGCTCTG  
TTTTAGTAGNTTCATATCGNCGTNCAGCNGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAGTGT

ACNCGCCATAACCCCTNTGCGACATGAGCACCCATGCNAAAGAGTNCNAAAGCTTTCTAATTNTCTTTTCGCT  
GGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCNCCCAGCGGCGTGTATTGTACTCCNGAGCAG  
CTGTAGNAGGTGTCGGTGTGATGAAGAACCCGTCCCCTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCGT  
TGGTCACGACGACNGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGNGCTC  
ATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACANTCCGTTCNNCTCTGCT  
CCTCCTNGTCTGCGNCTNTGGNNCCTTATNCACAGTATAAACGGNTGACTCNAGGTAGCATATNGAATANNC  
CTNCCTTAGCACAATTCGTAGCATCATGACNTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTCAG  
GTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTNATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACG  
TGCCCTTGCNNNCGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTCACAACATNACCATGA  
GGATCTGTTATTCGGGCGGTCTGTNAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGNTATTAAGCTTCC  
TTCATACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAA  
GCTGTGGGGTAGTTGGCNAAGAATTGGATGGNNGTTCGGCCTGGTCTTCGCCGANCTAAAGAAACNGG  
GAGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGNCCATGGGGNGGNTAGTCGACTCNTAGA  
ATAACACGGCCGACNTTNTNGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGG  
TCCCGNAAACCTTGTGGTAGTNGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCT  
CACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGNCNGTACCGNCGGGACACTCTGCCGAGTTG  
CTAAACTGCNCTCCGGTGAAGGNNTTTGGTGTACTCTATGTACCAGGGGGTATTTACCATTTGTCCAAT  
CACATTCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCCATGTGCGATNTGGCTCCACCCGCTGTGGGCCATCTTNNATATCCAGCCTAGACCCGAACACCTACAAA  
GAAGGAACCACCGCAAGTTGCGTGACGGTGGTGTCTNCCTCAGNCACCCTTCTAGTCACTGAGTACGANNNT  
NGGATAGTTCATAGGCATNTATAANCNCGCACNNGAGTTAGCAANTCCNNANCCTTCTCCCCGCTNTTTGG  
GCTCNAGATTTGGGGGCTCCCCGTTCTGCNCGGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCA  
AGGCTTTTTACTNGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTA  
CATCCATGGCGTCCCTATACNTTAGTCGGATCCTGTTCTGGCCTATANAGAAAGCTGGGGGNACNAGNGA  
TTGCACGGCAGNGCGAGGTGATGTCCGGGGCATNGAGATTATCCCTATCAGTGGGACATGGGATNGANNA  
GCGANAGAACTGAGCGGAATTNNAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTNACTGGT  
GAACGCTTNGGGTGCCGCGAGGAGTGTNNNGAGATCGCATCANGCNNGNCCCTACGTTGCGCTGGCCGCCG  
NCGGTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTNTGACCCCATGATGGGGAAAGCACGGC  
CTAGCCTGACGGATCCNGTCGTNTAACCGGATTTNTAGTTCGCAAGTGGAAAGTGCCCCGTGNGNACTTCTCT  
NCTGAGTAGAGCCCATCAGTCCGNTCACGTNCCGATCTGAATCTTGGCTAGNCNCGCCNTANGTTCCCGAT  
ATTNAGCGCTTAAATCTNTTCCACCTTNGCCGTGCATGCTGTCCATATGCCACCAAACGCANCCAGGGTTCTG  
CGCTGCGAAGAGTTGANTTATGTCTGCNCTTCTATTCTTNTCCAATTTGCGTTTCAGCGTGTGGCTAGTAAA  
GTGGCCNGNNAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCANAG  
CCCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGNGTCCANGTCTCCATTTGGC  
ATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGT  
TCCAGCACATGACATTCCGCCACAAGNTCTGCCACNCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCA  
GGTGCGAGTNGGTCCCGGTTTGAATATGTTAAATTTGGAGCATGCTTTATTCGCACTCGGGTTGGNGATCTTT  
CCTANACTCAATCNNAATCTTCNCTAAGCGAGGATTACAGCGCNNTNATAATNACCTCCACGTTCTGCCTC  
GCTCCGTAICTGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACNAAAATNTATAGGGTATTGCCGA  
GCAAGTAACGACAGAACGAATACCGGCNAGGCTANNCGTCTGTCTACTATCCTGTAICTCAACTCAGCCGAAG  
ACGACGGACAGGGTCCCGGNCGGGAGATGGCGTGCAATCCTCGTACCGAGAANTCGNAAGAATCACCGTAT  
GGGGTCANNACGCCGATANTGGCGCCNANTGNAGCCCCAAGGTGCTTTGATAATTCCCGGACGNNGGNATC  
AACAGCCGACGGGTCTTTTGTAGTCCGCCGNGACNCCGTGGCGNNGATCCGAATTTGTCTCTCTGGTCTAAA  
AGGGTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTNGACCGGACATAGCCATTCAATGN

GCTCTCTCGTTCAGGGCTCCGTACAATTGGCGATCTCATCTGTCGNAGGGGTTGAGGANTACTGAGCGCGGA  
GCCAGCGGCCCGNCGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGNTAAGGGG  
GTTCCACCGCGACAACGAGNCGACTGTGTCGCAGTAGATCAGGCANNTGTTNNAGTGCTAGGTCCCACGCC  
CAAGGCTCTCGGCGCAGTGCTACATGTACCATAGGCAANCCGCTTGTGTGGACGTANNNGCNGAAAGGGC  
GACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGNGTAGNNNNANATCTCGCNCGGGG  
GGCAAGTCGGATGAGGTTGCCGAGACCAACGNCCGACAGTAATTTCCATAGGCAAACCCTCCTCTNGAATC  
TGTACCGCTATTCTGGATAGNAAGGAAGTACNAACTANACGGCCCCGTGTCAAAGACAGCGNCAGACAGG  
AGCTGGATGATCAGTAGCTACCGGGTACNCCTCTCNGANTATGGGGGGGTAGGGGGNCTATTAGATGAGGC  
CCTCANGTCTCCCTAGTNTACGCCNACNGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCG  
TCGNNTATNCACTACCCCAACATAGCATGGTAAGCACTCAAAATCCATTGCCATTGCAACGGCGGCTAAGTAG  
GGNGCTANGCCTTCGTACGGTGTATGTGTACTGGGCCGCTTNTCTGGGCGACTAGGAANNCCAGAACCCCT  
AGTACGTGGGNGCAGCCTCNAGCGTTGCTATTTGTTNGCCCATNGGAGGGGTCCGCAGTCGGGCCCGTATT  
ACCAACGACGCAGACCAAAAGAGGGCTCGGGTAGAGCGCTNAACTTTGGGTCANAANATCGTCNTAACCC  
NNTCAGCGCCATACCCCAANGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCN  
TGTACGATTNACAAAGANCCCTACCNACATCGNGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAA  
AGCACGCGTGCNNCGCCCTGACTATCNACCCGCGTGTACCAAGCAAGCANCCCGACAAATCATGTCCAGT  
ATACCCTCCTTTGTTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGNTATCT  
CGAANCCAGGCNACCGNGCAATACAGGGGACAAACACACGNACTNCACGCCGCTTTTNGACACTGAATCG  
CGNCCTACTTGCCCGATGTCATATAANAAAANGAGACGGGCCCTACAGTCGTCTGTAATGGACTNATACT  
CGACCACGCTGCGAGTACTACCGCTACGNGGCCATTTCCACTGGCACAGNCAGCGNCTGGGGGTAGTGGC  
ACGAACGTTCTACGAAAGAGTCCCCGTCTAAGGCCNCAAGTTGACCGNTCAAAGGTCCGGCGNTTGGCTAC  
TAGAGGACNATGCAAGGCGATCGGAGTCCCCTCAGACGGCTCTTCGAGACTATCCNAAAGCCTCTCTGGGG  
ATAGCAGGAGNTTAACTGTCCCGATTNAAAAGAACCCGCTATCGGGGACTAGAGAGANATATATGCCTACGG  
TTACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAANNAGGGGG  
ACAGTGACCGTACCGTCATCAATAATCCCACCAGCNGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAG  
GAGCCTAATTAAGGCGAACGNAGGTATCGTTCCCTNTCGCACATGGCCGNCNTNACCATTATGTCACAAGNA  
NGATGTCAGACCCCGAGGTGTAGCGAGCGNGCGGAATNGGATCGAATGAAAAAGCTGTGCATCCGGAAC  
ACCGTCTTAAGAATCGCAAATTGAGGGCGCTGANAGCCATCCACTGCCGTGGCAAGTGTNCGTCATNCCTACC  
AAGCGTCCNAAGTAGCCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAANTGGGGCTTCGGACA  
TTGATGTGGCTGTTACAGCCTGGCCGTATACTTAAGTTCAGATCGNGACCAAGAGCCCGGTACGTCCCCC  
GATGCCGAACCAATCCAATAATNNTAACGCCANGAACCGNTTCAAAAATGGACCTGCAGACGATTGA  
GCTTGAGCGTNCSSCAAGGGAAGGANCCGTAANAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGA  
CAATCAATTGACAAGGGGAAAAAGNGAGCNTCTCCGCCACCAATTGCCTTNGCAGTGCACGCCCGGTCC  
TGCGCATTAGAGCATGTGGACCCGAATNAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTNGACCTTCC  
GGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTNCAGAAGAGATCATNCCTGTATNAGTGAAGTNA  
TGGTCGATTANTACACCGCCGCTTAAAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGNTA  
ATAATGNCAACGCCNGAGCTGGATACGAAGTAACGCCNCTCGAAAATAGTGAGGTACGCGGGGAGATGTCT  
CAANTCCGGGGGGNCGTCTTAGGAATCGCGGGTGANGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGNG  
CANGCTATCAGTTGAAGTTATAGGTGAGGCTCGNGCCGTNNNGAGAATACTGCAGATCTGAGGAAAACCCAC  
GCGCTAATACNGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGNGACGCNCGATGTAG  
GTACCAATCGGCCCTATNCTACCNATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATNA  
ATCCGAGGCGAGTGGGGTAAAAACACGGAGAGAGTGGGACGGGTGGCGTTCCTGGGTAAACAAGGAAGGGA  
GCGGCTCGAGCGGTCCATGAATCAGGTTGATGTNAAAGTACCNGNAGACCAACCGAGGTCCGTGCTGGACA  
TANNNTAACACAGTGCCGCNANGNGTCCGTAGGTGCGNGACCTACAGNGAAAAGATCGGAGGAATTTCCCG  
GCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCANAGAGAGTGTCT

GGATGCTNANGANNCTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGNGTACACCTTAGGGGCACG  
CAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTTCGGATGTAACCCGACTATACT  
AAGAACCGCTNTGGACTGACCAAGAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTT  
GGGGTCCATTAATGAAATACGGACGAATNCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTT  
GCCTGGCCATAGGAGAGGCTNTGGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGNAAGCCG  
CTGCANGCGCGTTCGTTACGCCAGTGAANACCTNCAGACGGATTGCGCACGCTTTGNANNATGCNGTCGGCC  
AACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTNAGCTATCCATGATATTGGTGGTTGTAGTGTCTGG  
AAGGGGTGACGAGNATATGGGGTAGGCAACATCGGATGNNAGGATACGGGGGCCCTTGAATNGAAAG  
AAGGGAGTGGGAGTANAGTAAGAAACCTATGTCATGNCCGGGGTAGACCAAGCAAGCTCCCTAGGAAGC  
GAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGG  
TGTCTTAACGTTGCNAGGGACCTGAGCGAGGGCCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGNTCA  
GTGAAATCAATACCCCTAAGACCNATTTTAAAGCCATTATTNGGTAGTCGCGACAGAGGAACTGTCTGNNCC  
GACAGTNTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACC  
GAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGNNATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAAG  
CGAGTTNACCCGGGAGGGAATGGAGCCCAGANCATGGCTATTATGAGGGATCCGCTCTATTTGGGACCCTC  
CTCATNTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATCAGAATTTTGTGTCGGACGTTAATCA  
GCCTNGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACG  
TGAATGCAGCATCGGAGTCTGATGGGACAANTCATGCGCGCTNGTGTGCGCAATTGCGGCTAGGAGAACCC  
TCGNGGACNNACGAGGGTACANCGCCCGTATGAGAGCCCACGGGGGANTCCTCGCTGCGTGTGTGN  
CGGGTGGTTCANCCCGAACCGCCACGTAGCAGAGCAAGAAGTNGCTTGTANCGACTTGCACCGATGAGGA  
GAGTTCAANTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATNGAAGGGCGAGAGAAAGCGC  
AGACGGNACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGNGCATGAATGCTGCCTTAGCNAAAAT  
CTTCTAAGATTGNNNCGACGCATTNAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGNNTTAGGGT  
CGTTAAAGTGTTC AACGCCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCC  
GGCGCTGCGACCTCTGCGGCCAGGCATNACCCGGT GAGGACTTTAATAGCGGAGGTCTCTGNNACTCACTN  
ACGCAGGATACGATTNGAGGGCGGAAATNTCCCGTTATAAAATCCAGGCTNAANGAGTGATCAGAGCGCNA  
ACAAACNACTCAGGATTCCGGCAACCGTAATCCNGACAGCGGCGNCAGTTGGNGAACAGCGTCGCTACCCTG  
TATTCTGCCCCATACGCTTGTGGGGATCNGCCGAACTGANTATCATGCGAGGGGNNNGCAATCGTCTCCTCC  
ATGCCCTTNNNAGGAGAAAGATTCTGCACCAGGGCNTNCGCCTAGCATTTGATTTTCTTTCNTAGGCACTTC  
GTAGTNGTACTNATCGAANC GAACGAACTGAACGTGGACAAGAGAGATATGCNGACGAGACGAGAAGC  
GCTTCGCGTTNCAAANTCGGCGAAAGGCGGT CATGATAGTATATGGGGN GGGGTGAGGGAAAATGTAGCAG  
NCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGNTGAAATTTGNNNAAGCTCANTGGGACAANNATGAG  
GGGNGGGCACCTGTCAGGTTTCGTTGAACGNNGTACCANANACACGCAGACAAAGACACCCCATTTGCTGCTAC  
AGAGGTGTCCTCATTGTATGGTGCANACGNAGT GACTCTTCAGGTTCCAATNGCTGNNCANGTATANNTNGA  
AAGAANNTAGTTCCAGNGAAACCGCAAGAAAACAGCTACCCGNTCNAAGTGCGACNANGTTNGGTGCTG  
AGGTATCAAATGCTTCCACGGACGATT CAGAAGTTTGGGAGGANCTCTTGGCATTTC AAGCTATCTTATGCCA  
NACGAAGGATCTNNCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCNGNGGNATTA AAAAATAT  
CTCGACCNGGTGGGCGGAGANAGAGTGAGNAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAG  
GTGTCATAGTTT TAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCNCCATAAGCANGNNACTNGTG  
GNGTTAGGTAGCGAGGGNCCAAAGGAGNGACCCGGAGTTATCATCTACCNCGNAGGGGGGAAAGTTTCCA  
GAATCAAGGTATGAGGATAAACACNCCAGAGCATCTCAGAAGACGGTGGNGACTGCTTAATCTGATGTGCGA  
ACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAANACTGGGAGAAGTACGCTATCAGGA ACTATGTC  
AGTATACAGGGGCGTGGGCCTAAGAACGANNCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAAC  
NNNTA ACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGT CATAACCCTTCGCAAAGGGAGGAATTAGA  
AGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAANTCAGTTAGCAGGAGGGGCGGAAGAGTCCATAC



NCTAGTGAN CAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATTTAGAATCCCTAGC  
CACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGNCNCAATGGCGGTGTGGNGAGTNCNGTAGTCTCCA  
CCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGNCACGGAG  
TGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGATGAGAGNCTCTGGCGACGCCCCGGAG  
GAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGG  
AAGCTAGGGANGGGAAGANTTGCANGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCC  
CGAGCGGTCTAGTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCATTTGTGAGAACGCT  
GGGACCCATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTGGCAACTGGGCATAGNAGCATATGCCCAAGTT  
AAGGTCTCTGCCGACATGAGNCCGGGGAAGTGGAGNACAAGGATCGTATGGACCCTNNAGCCCAGTCTAAT  
CGAAGGAATTAANNTTCTATCACACAGTGCCTGCTTAAACGGTGACGGANGTTAAAGTCTCTGCACTGGAT  
GNCGGTGCCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAANNTAGGGCCGTNTAGCCNTAC  
TCATGGCCCAACNGTCTCCCGTACGANGCTAATCGCACCCCTGCGCACCCGNAGNAAATTTTCTCGGGCGG  
TTACCTAAGGCTGACACTCGCGTAAACAAGATATTGCCAGCGGATCGCTGAGGANTAGGGAATAAGTTTGCCG  
NATTCTGGCGCAAAAATCTGGCGCCGCGGTAGANGCANAGCACCCCTTGTGTTAATGTGACGAGGTGAAGCG  
CAACNGTGTGATTGGGTTGCGATNAAAAAGGNGATNGTACCTGGTTAAACNACAGTCCCTAANGCTTCTN  
NTCGCGGCATTTGTTGAGGGCTGTANGGTAAAAACCCAGGCAAAGAGAAACNACGTAACGATCTGGNTGGA  
GCTCTTGCTATACTGNNAATGACNCACCTTTGAAAGTACGCGCGGAGGGATCCNCCGCCTAAGAAAAGNG  
ATACCTCGAGTGNAGGTGGTNCATCCACCCAGATTCTAAGTGTGGAGGANACACAGNTCCGAAGNCGAA  
CAGCTGNNAGTGAANCACNATTGGCCCCCAANNACCAATCTAGCTNGANTATACCATTGATCGAAATAC  
AAGCAATGTTTCANTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAA  
CGTCTCCCCTTNTGGTAAACTGTACCCAGGATCNTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGANACAGT  
AGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTNTAGACTAGGGCCCAATTTTTCGCAAGAAA  
GACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACANTGGGTCTAGC  
GGGTGATCGAGAGAGTGAANGGGGCTGGCCATTTAAGAACTGATTACAGCTNTTTTTCATGGAGCCGCTCAA  
TAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGATATTCTGAAGCCT  
ATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATNATAAATCCAAGGCAATCTACTTCTATTCA  
GGGTGGGNATCGCTGCTAGGCACCGGCGGGCCAGNAGGGAAGGGACGGTTATGATACCTTACCNGGTCAAA  
AGCGACAGACCCTCAGACAACGTCTAACACGACCCCNCTGGAGTGGTACCNAGATACTGAATTGCCAGGTC  
GAACATCTAGAGGAGGACGGNANAAGATNGAAAGGAGCTGAACGCGAACAGGNNCGACTCGGACCGCAG  
GACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACC  
GTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATNTCCCTCCGGCATCGAGAAG  
GGCGGTTGGCGGCGTACTACTATAACTGAGCAGTGGTCACTCTAGNTGAAGATAACCACGCAAGGAACCCCT  
CTCTCGAATTGGATTANGGCGNCCCCAAGCGGGACACTACGTTGNTGCTCCAAACTGATGGAGCCGGGATAG  
AAAAAAGGCNATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGANAAATCTACTCCGACGGGGGGA  
TCCCCTCAAATCCGACGAGGTTACCCCCGCGCGCCGCACTCTGTTATTACGNTCTTTCTGCCTGGATGCG  
AGACCGATAGTTGTCTGCGTTAGCTACTCAGAGNTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTG  
AGAGNAGGCCGACGTTTTCATGGTAGGACGAAATGGGAGGAAAAGTNTGNCTATAACACCTAACAGCAGACAT  
TGTCGGCNCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGANGTTTGGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGANNGGCGAGAGCCCTAATGAGGCGGTGTGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCANNCAA  
CCAGGTCAAAGACGTCTACGGGCNCCATGGGTAAGCGGTANNCCNTCAGCATCAAAGCCTTACGNNGGT  
GCCCCGTGCCCAAGGTNNGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGG  
CCATAGCGACCAAGTAGATTGTAGCGAAAAACTCGGAAGACGTGTTTTGATAGGGTAGCGTCAAAGGCCGCC  
TAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTC

ANAGACGATACGTAGAGCTGNGNNGNNNNNTTGTAAACCAAGTAACAACAAGAAAGCTACNNTGTATCCGAA  
TANGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGNNGGGCGCGCTCNCAACGGCGTGGCCTTTGNGCTGCTCTGGACTAAGG  
GCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACT  
TACTGGCCGTACTATACGGACGAGACANAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGA  
GGTGATAGTCAGTGCAGGAGGTGTCACTAGCTCAGGTGCCGGGCAAGTCGNCGTAAAGTTTCTGTCGGACA  
AAGNGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCT  
TGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGCCACTGTTAGTATGCGAGCCACGCAGCTG  
CAGGTGGGGNCGAGCGGATTAGCCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTA  
TTTCATCGAGGTGACANACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCG  
TAACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGA  
TAAGATACCCGCAAAGAGTGCATAAAG

>P33, London\_28, VIM-2, 02.12

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGGTTGCTCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA

TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGC GCGTTTGCCTTTGCC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCATTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATTCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTCCGGGGCTGC  
CCTAATAGATGTA CTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTCCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGACGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC GAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAAAAACCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA

ATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTTCTTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTCGACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGNGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGG  
GAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AAACTCAAAAGTCGTGTGCGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTAGCCGAT  
ATATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTAGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTAATCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCGGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCACGACGCGAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGTCTTCGCGGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGCCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTGCGGCTTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGAAGGGTTTTGGTGCTACTCTATGTACCAGGGGTTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC

ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCNCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCAGTGCAGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTGCTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTATTGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AATTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTAAGGGCGCTTATCTGGGCGNCTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGGCCGTATTACCAACGACGACAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAC  
GAGACCGGGCCCTACAGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC

CATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTNCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGAGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAAAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCAACCGCATCCGGGGAAGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGCGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAAAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG

CTTGTAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGCAGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGN  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCAGCAGCGGGCCTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGNAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTTGTTGTTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCTTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGCTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC

CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGANAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCTGACTACTATAACTGAGAAGTGGTCACCCTAGCTGAAGATAACCAGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGTTACCCCCGCGCGCCGCACTTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGNCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P3, North West\_16,VIM\_07.06

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCNCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACNCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTIONCACGAGTGACTIONCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACGGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG



ACTGTAGCTGGCTCTACCCGACTATCTATTGCTGCTGCGCTTANCGCCCCCAATTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCGTCTATTGGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCTAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAANCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCGCGTCCGTTGACTCACG  
AACATTTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTTCGGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTANCTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTTCGGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCNCTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGCGGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGCGCCGAGCGCTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCGGTANGATTGCTAAGATATCCATTACGC  
GCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGA  
CCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCTTACTTTTGTCTAC  
CTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCGGGAGGATTAGATACAGTTTCTTTCGAGCCCTATCCTTTCCGCATACCAAACAGATTAG  
TCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC

GGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGAGTTGGCGCGCAGCTTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGNTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCCTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAACTCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAACACTATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGNTCCG  
CCGACCAGGGCCACCCTCGCGGACNGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTAATAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTGCACCGCGGCTCACGACGTTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGNGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCNGCACGNATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAAATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCGACTAGGTTAGGAACC  
TATNCAGTACCTCTTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCNAACTATTGTAATGGCGAGCACATTAAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGNCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGNGGTCACTACGCCTC  
CCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGTCCCGACGTACCTTACCCACT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGTTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTACAGACC  
TCGNTCGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACANAGGGGAAGTCTCCTCCTCCGTACGG  
GAGAAGAACTANTTTTCATGTTTCCGCGTACCCTACGTCGATCAGGCTCGCCGGCTGCCCCAGCACACGTTGG  
CTAACCGCTCGAATTAAGCCNCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCTCTCGA  
CCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTC  
AGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGA  
CAACACTCAAAAGTCGTGTGCGGGTACAGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATT  
TGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTACTGTAGG

CCTCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATNNNNGGTAGATAAACGAGTCAAGT  
CCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCG  
TGCCCGTGAGGCTTCTTTCCCGCCAGTGTTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTAGCCG  
ATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCA  
GGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGG  
CGCTCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGG  
TAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTT  
TCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGA  
GCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTG  
CCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGT  
GCTCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTTCCGCTC  
TGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATAT  
CCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCCTATTAAGTTCGGAACATCCAATGATGCTTTCA  
GGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGAC  
GTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCGTGCTACCTTACTCACAACATCACCANGA  
GGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTTATAGGATTGACCGCTATTAAGCTTCC  
TTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAA  
GCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTCCGCCGAGCTAAAGAAACCGGG  
AGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATA  
ACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCC  
CGGAAACCTTGTTAGTGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTACCTCAC  
CCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTA  
AACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATCAC  
ATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGC  
CCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAG  
GAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTACCCTTCTAGTCANTGAGTACGATATTTGGAT  
AGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGCNCCTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTCAAGGCTTT  
TACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCAT  
GGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGCTATACAGAAAGCTGGGGGACCAGGGATTGCACG  
GCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTT  
GCGNAATTCTACGGGACGCACCCGCGTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAG  
AGCCATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATNCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTGAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTNGTAC  
GAAACCGCACTCGGAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGTTTCGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAAT  
CTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAICTGT

AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTAICTCAACTCAGCCGAAGACGACGGACAGGG  
TCCCCGGGCGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGC  
CGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCGGACACCGTGGCGNGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGNAACC  
GACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAG  
GGCTCCGTACAATTGGCGATCTCATCTGTCTGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGAC  
GACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGACA  
ACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGGC  
CAGTGCTACATGTCACCATAGGCAACCCGCTTNGTGGACGTATAAGCAGAAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAG  
GTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGA  
TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCNACTGAAAGCGGGTGTGCAACGTATAGCCGCTAGAGGATCTACGGCGTCTGTATACTACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCNTCGTAC  
GGTGTATGTACTGGGCCGCTTATCTGNGNGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGGCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTCGTAGGACGATGTCACNTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCTGNAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCCATTTCCACTNGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCN  
CCGTCTAAGNCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTNGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTNCGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGC  
GGGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGAACCGGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCGTAACCTCGGTAGCGAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGAGAAGAGATCATCCCTGTATTANTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAA  
GTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATC  
GCGGGTGTGTCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAG  
GCTCGNGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTA

GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGA  
GGAGTGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACG  
GAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCANGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTCTGGACATAGATTAACACAGTGCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTTAC  
GGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGCG  
ACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAGCGGAGCAAAACGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAC  
ATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAAGCC  
ATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG  
AAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGANTGGAGCCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA  
AGAACTTTAGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGA  
GAGCCACGGGGGAATCCTCGCTGCGTGTGTGNGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGC  
AAGAAGTTGCTTGAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT  
AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCAAGATTGTGCGGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCNGCCGAAGTACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCT  
AGCATTNGATTTTCTTTGCTTAGGCACTTCGTAGTGGGACTGATCGAAACGAACGAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCNTGATAGTATAT  
GGGCGGGGTGAGGGAAAATGTAGCAGNCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACG  
CAGACAAAGACACCCATTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTACTCTTACAGTT  
CCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTC  
CAAGTACGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTT  
GGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCNGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTG  
TCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGNCCAAAGGAGGGACCCGGAGTTATCATCTACC

CCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTATCAGGAATATGTACAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCC TTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCA TAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACNCGAACGCCTGATTGGTAACGGAGCCTGTA TTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCANCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGNGATAACAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGNTAAAAACCCAGGCAAAGAGAAACAACGTACGATCTGGTTGGAGCTCTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGANACACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGGGTCCAAACGTCTCCCCTCGTGGTAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTCGCAAGAAAGACTAAAGGTGCGACAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCNGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCAGTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTIONATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACNCTACGTTGATGCTCCAACTGATGGAGCCGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAANCTACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCC TGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTGAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTGCGCTCCGACGGGCCGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGANAGGGCAGAGCCCTAATGAGGCGGTGTGCAAAA TACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTA

TAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATC  
AGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACG  
TGGGTGCCGGTGCCGCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGC  
TGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTATAGGGTAGCGTCAAAG  
GCCGCCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTG  
GCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATC  
CGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGTCACTATTCGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P42\_2, London\_28, VIM-2, 11.12

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCTACTCGGTCCGGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTTACGCAGCCTAGTCGTGCGGGAGATAACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGCTGCTGTCTGGATCTTT

AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTACGGTAATTTTTGTGCCGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGGAGCCCCATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGTC  
CCTAATAGATGACTGCATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCGCTTACGCTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGGCTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCANCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA



TCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTCTGTTTCACACTGTGCCACTGACGTTTTACGACGGTTGT  
GTACTCGTGGATGCCTATCGCTTTTTTTCTTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAGCGCT  
CGGCCGACCAGGGCCACCCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACC  
CTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTC  
GAAATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCGCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGCTGGGGTCCCTCCCTTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTTCC  
ACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTCTGTCGCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTCCGTA ACTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA  
AACCGCTGGGTAAGGCGCAACTTGGCGAAGTGTGTTGCCGGCGCTCGACACCGGCCGGGGGACTTTATACGC  
GCCCCGCTGGGCCCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGC  
CTCCCCTTTACAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTACCTTACCCA  
CCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTGGGGATTCCCC  
GCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCAC  
GACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGACCCACACAGGGGAAGTCTCTCCGT  
ACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTT  
CGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCC  
GGACAACACTCAAAGTCGTGTGGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCTCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTC  
CAGGGTATTTGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTA CTCT  
GAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTAT  
TGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCGGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT  
ATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTA ACTGTTCCGAACATCCAATGATGCTTT  
CAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCAGCTGG  
ACGTGCCCTTGGCGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCAT  
GAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTT CATAGGATTGACCGCTATTAAGCTT  
CCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTC  
AAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTCTCGCCGAGCTAAAGAAACCG  
GGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTAGA

ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGG  
TCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTACCT  
CACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAAT  
CACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAG  
AAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTNCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTG  
GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCT  
AGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAAGATAATCTTTCAAGGCT  
TTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGTGTCTACATCCA  
TGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGCACG  
GCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTT  
GCGCAATTCTACGGGACGCACCGCGTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTGGCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTCAGATGGGCCGGCCACTGCAACTAATGCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAAT  
CTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGT  
AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTGCGCGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGG  
TCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTTCAGAACGC  
CGATAGTGGCGCCANTGAAGCCCCAAGGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCG  
ACGGACTGACGCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGG  
GCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACG  
ACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAAC  
GAGGCGACTGTGTCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCCAAGGCTCTCGGCGCA  
GTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATC  
GAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTT  
GCCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAG  
GAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTA  
CCGGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTAC  
GCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACTACCCCAAC  
ATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGG  
TGTATGTGTAAGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCA  
GCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCGCGAGTCGGGCCGTATTACCAACGACGCAGACCAAAAG  
AGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTACGCGCCATACCCCAAG  
AGTTCAATGACCCATGTAGACAAGTGCGGAAGACTCTGAAAACGGCGTGTGTACGATTCACAAAGAGCCCT

ACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCGTTCGCCCTGA  
CTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGG  
GTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCGACCGGGCAATA  
CAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCNACCTACTTGCCCCGATGTCATATA  
ATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAGCTGCGAGTACTACCGCTA  
CGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCG  
TCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAG  
TCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCCGATTCA  
AAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCA  
GAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCC  
CACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATC  
GTTCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCG  
AGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGC  
TGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGG  
ATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATA  
CACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAA  
CGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTA  
AATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGT  
CTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACG  
ACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTC  
GATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTAAGTCAGCG  
GACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAAGTAA  
GCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTG  
ATGCCCTGTGAAGAGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGC  
CCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAG  
ACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGC  
GACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGG  
GTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGTTGATGTC  
AAAGTACCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTG  
CGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAA  
ACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGC  
AAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGCGTGGT  
GCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAA  
AGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGTCCATTAATGAAATACGGACGAATCCGATGCCGT  
TCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTC  
TTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGAC  
GGATTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAG  
CTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATT

ATGAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGGCGAGACGGCCTTCTCGGC  
ACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCGGCTAGGAGAACCTCTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCA  
CGGGGAATCTCGCCTGCGTGTGGGGCGGGTGGTTCCATCCCGAACGCCACGTAGCAGAGCAAGAAGT  
TGCTTGAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAG  
TTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCG  
AGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
GATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAAACGAACTGAACGTGGACAAGAGAGAT  
ATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGG  
GGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAG  
CTCATTGGGACAAAATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATGTGCTACAGAGGTGTCCTATTGTATGGTGCATACGCAGTGACTCTCAGGTTCCAATGGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGTA  
GAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACATATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTATAACCCTTCGCAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACG  
GAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGCG  
ACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGAT  
GTAAAGGTCTGGAAGCTAGGGAAGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAG  
ACGTTGACGCCCGAGCGGTGCTAGTTGTGACGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATT  
TGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCA  
TATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCCTCAAG  
CCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCTC  
TGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTC  
TAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATA  
AGTTTGCCGACTTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCTCTA

ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGTACACCCGAGACTCCAGGCCGATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCC  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTCACCAAGGTTCCGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTTCTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCTTCAGGCGAAGCATCGTGCTACCAGCCCGCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>E10, London\_26, VIM-2, 06.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTNCCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACCTACTCAACTTTTAGTTTCANTAAGGCACCGACAGCTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GNTCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACC  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT

TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGACGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCATGGTCTGTAAAATATCGGGACCAACCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTTCGTTCCCGAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGGAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTGACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG

AGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTAATCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTCGNGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGACAATTTCGTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTTAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTNGCAGCCAGCGTACAAATCAACCGGCGTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTAGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACACAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGACTAACCTATAAGTCAGGCTTTGTACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTTGGC  
CAATTCTACAGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGTATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC



AGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTAC  
AGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGACAACGAGGGCA  
CTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCAACATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGGCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTGTAAACCCCTGTCAGCGCTATACCCCAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGATCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACTTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTAAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTCGAGACTATCCCAAANCCTCTCTGGGGATAGCAGGAGCTTAACTGTTCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAAGCTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA

GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGC  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAC  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAAGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAAGAGTGATCAGAGCGCGAACAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGCT

GCACATGTATAATTGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACG  
GAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGCG  
ACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGAT  
GTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAG  
ACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATT  
TGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCA  
TATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCCTCAAG  
CCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCCT  
TGCCTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTC  
TAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTTC  
CTCGGGCGGTTACCTAAGGCTGACACTCGCGTAAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATA  
AGTTTGCCGATTCTGGCGAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCAACATCGAGAGGAGGACGCGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGCGTACTACTATAACTGAGAAGTGGTCACTTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG

GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>E9, London\_26, VIM-2, 06.13

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGCGCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGCGAGGGTCTTTCTCGTCTATTCCGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGACCCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT

GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCANTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGNCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCNCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTTGTAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCATATCATNTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTNGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGNTCGGTCCCGTCCGGTATACATTTCTCCGCTTGACGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTCCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA

GTCGTTGATCANCACCTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGTATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA  
TCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGT  
GTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCT  
CGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTCCCCCAATATCTTCTCCATTGACC  
CTTGATTAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTAGCGG  
ATGCTATTCTACGTTGCTCCCGGGTGGAGCGGTGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTC  
GAAATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGC  
CGTCCGCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCC  
ACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGAGATCAAATATGCGGGTACCTTACGCCGTTTCTGTTCTGTCGCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA  
AACCGNTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACG  
CGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACG  
CCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGTCCCGACGTACCTTACC  
ACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCC  
CGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCCACCTGGACTTGAGTCA  
GACCTCGATCGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCTCGT  
ACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCTCT  
CGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCC  
GGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCCAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCCTCCTTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTNTACT  
CCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTAGT  
GGGCGCTCTGTTTTAGTAGCTTCATATCGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCTAGCT  
GGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCT  
CTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTC  
CTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACT  
ATTGCCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCCGCGCTGATGGTCCATCC  
GCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCC  
GCTCTGCTCCTCCTAGTCTGCNTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCNAAGTAGCATATCGA  
ATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCT  
TTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT

GGACGTGCCCTTGC GCACGCCAGCGTACAAATCAACCGCGCTTATTCCGTGCTACCTTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGC GTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTT CATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCNAGATTTGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGACGACATACGATAATCTTTTCAGG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGGAGGTGATGTCNNGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCGAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGNATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTGAGTGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTNGAGGGGAAGCCCGGGGAGGGACGCGTGTCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCACGAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTNGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTNCGA  
GTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGNCTAGTCGTCTGTCTACTANCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGNCCCAAGNTGCTTTGATAATTCGGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCNCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTGAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT

CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGNA  
CGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
CTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGA  
GCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCNTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT



GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGC GGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTC  
GGCACCAGAATTATTTGTTGTCGGACGTTAANCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGA  
AACTTTAGGGGGAGCTTAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTACTTAAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCAACAAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGT  
CAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATCAT  
GCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGC GCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGATGATAGTATATGGG  
GCGGGGTGAGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTGAGGTTGTTAACGTGGTACCATAGACACGCGAG  
ACAAAGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGG  
GGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CNGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTGATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCACCACTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTAC  
ACGGAGCCGCGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTG  
GCGACCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGA  
GCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACCTGAGATACAAGGATCGTATGGACCTC

AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
GTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTGGCCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCC  
TAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATAACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGTCCGAGGCGG  
TCCAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGC  
AAGAAAGACTAAAGGTGCGAGCGGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGTAGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTACTGATTACAGCTATTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
CTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCAAAGTACTGAGGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTGCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGNCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTNNGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGGACAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT

CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P24, London\_17, VIM-2, 08.10

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCAAACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGANGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACNGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GNAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATG  
TGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGCCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTGCCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCAATTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGNTGTTAGCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAAGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTG  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGCTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCA  
GCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAG  
CTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCCATGCCCTGCGGTT  
GCTCGTACCACATTATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCA  
CGAGAGGCCGGTTGATTAGTATCCAAGCTCTTACGGTAATTTTTTGTGCCGGACTGGTGGCGGTTTGCCTTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGAGTTCCCGTCCGTGACTC  
ACGAACATTTTTTCCGCCCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGGTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCA  
TATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTG

ACGATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGG  
AGTGGCCTTGTACTAGGGCGCCCACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCC  
TCCTCGCAGGTAATCTCTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTT  
AGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTA  
CGCGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCAC  
CGACCTACCGCACAGGGGACTATTGAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACAGTTTCTTGTAGCCCCATCCTTTCCGCATACCAAACAGA  
TTAGTACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGTTTCGCATCCT  
GTTTCGGTTCTCTTGTAAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTGAGGCCCGAGGACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTTACCCCTCTTCAGGTTCTTCGTGCCCCGTTTGG  
TTTGGGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGC  
TGTCCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTGCGGCTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGTT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCGCTTGGC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTGGTTCGATCATCACTTGGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGT  
TCCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAA  
CGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGACTGCATAGCT  
AGTATCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGNAG  
CGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATT  
GACCCTTGATTAACCACTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCCGGGTGAGNGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTT  
ATGTCGAAATCCCATTAAATACACGTAACACTACTAGNTTACTGAGTTTTGACCGGCGGCTCACGACGCTTACCC  
CCCGCCGTGCCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGA  
GTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGGCACGGATCTTAGCTGTGCCCTTCT  
CTTCCACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTT  
CTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGAGATCCAAATATGCGGGTACCTTTACGCCGTTTTCTGTTTCGTCGCCAGACTAGG  
TTAGGAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCA  
CATTAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTA

TACGCGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCNGTCAC  
TACGCCTCCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTT  
ACCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGAT  
TCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAG  
TCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGACCCACACAGGGGAAGTCCTCT  
CCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCA  
CACGTTGGCTAACCGCTCGAATTAAGCCCCCTCCCTCCTTTATCCCTCCAGTCTCGAATCTCCCGGTACATCATGT  
CCTCTCGACCCCCGGCTTCTAGACGATAGTTATTCTAAGAATCAGCGGTGGCCCTCATCACGGCCACCCATC  
GAGTGTACGCCGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTT  
GTCCGGACAACACTCAAAGTCGTGTGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGAGACGGG  
TAACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTG  
ACTGTAGGCCTCCTTACTCTGCGCTCCGACTCTGGAGGAGTCTCTATGCTACATCGTTGGTAGATAAACGA  
GTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGA  
TTAGTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACTCCATCCAGATCAT  
TCAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGATC  
TACTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTG  
TAGTGGGCGCTGTGTTTAGTAGCTTCATATCGTCGTTACGCGGCACTACTAATGGTACCAGTCCCCGCATCT  
AGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAA  
TTCTCTTTTCGCTGGAAGACCATAAGACTCCATCGGCGGTGGCTGGCATGCCCCCAGCGGCGTGTATTTGT  
ACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCT  
TACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCA  
TCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGT  
TCCGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATAT  
CGAATATCCCTGCCTTAGCACAATTGCTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGAT  
GCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCA  
GTGGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCA  
CCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGG  
GGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTTATAGGATTGACCGCTATTAA  
GCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACA  
GGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTCTCTCGCCGAGCTAAAGAA  
ACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCC  
TAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACA  
ACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTC  
ACCTCACCCCGGTGCGGTCTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCGA  
GTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTATTTACCATTTGTC  
CAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATA  
TTNGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGG  
GCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTA  
CATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGGCCTATACAGAAAGCTGGGGGACCCAGGGAT  
TGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAG  
CGATAGAAGTGGCGGAATTACAATACGTCNCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGTGTNNCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC

GGTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCT  
GAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCNATACGTTCCCGATATTG  
AGCGCTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCT  
GCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGG  
CCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAA  
TGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGG  
GTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAG  
CACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGC  
GAGTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATA  
CTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
CTCGTAATATGAACAGCCGGCGTGCGCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAA  
CGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGAC  
AGGGTCCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGA  
ACGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGAC  
GGTCTTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGGTCTAAAAGGGTCGGCA  
ACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTT  
AGGGTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCC  
GACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCG  
ACAACGAGGCGACTGTGTGCGAGTAGATCANGCAGATGTTGTAGTGCTAGGTCCCACGCCCCAAGGCTCTCG  
GCGCAGTGCTACATGTCACCATAGGCAACCCGTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAG  
CAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGAT  
GAGGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTGAATCTGTACCGCTATTCT  
GGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAG  
TAGTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTA  
GTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGCTATACTACTAC  
CCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTC  
GTACGGTGTATGTGTACTGGGCCGCTTNTCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGAGTCGGGCCCGTATTACCAACGACGCAGAC  
CAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTGACGCGCCATACCC  
CCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTGTACGATTACAAAG  
AGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCGTTCCG  
CCCTCACTATCGACCCGCGTGCTACCAAGCAAGCATCCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTC  
TCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGG  
CAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTC  
ATATAATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTAC  
CGCTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGT  
CCCCGTCTAAGGCCTTCAAGTTGACCGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGAT  
CGGAGTCCCCTTACAGACGGCTCTTCGAGACTATCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCC  
GATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGC  
AGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAA  
TAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCA  
GGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAG  
CGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAAATCGCAAATTGA  
GGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACG

GCGGGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGG  
CCGTATACTTAAGTTCNGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAA  
ATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAG  
GAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGAACCCGGGACAATCAATTGACAAGGGGAAAAA  
GCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGCACCCGGTCCTGCGCATTAGAGCATGTGGACCCG  
AATGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGCCGCCATCTGTCCGACCAGA  
AGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTT  
AAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATA  
CGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAA  
TCGCGGGTGTGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTC  
AGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCCGGTGAGGAGCGCTG  
TAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGAT  
GAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACA  
CGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAG  
GTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTCTGGACATAGATTAACACAGTGCCGCCNGGGGT  
CCGTAGGTGCGTGACCTACAGCGAGAAATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCC  
GGACACGAAACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAG  
CGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
ACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGG  
CGACACAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAAT  
CCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTC  
CAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGGTTTCGTTACGCCAGTGAAT  
ACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAAACGGTAGGCGAGGA  
ACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
ACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTAT  
GTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGC  
TGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGG  
CCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAG  
CCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAG  
CTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAAC  
ATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCC  
TTCTTCGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGG  
TAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTC  
ATGCGCGCTCGTGCTNCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTAT  
GAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGA  
GCAAGAAGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACA  
GCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAAGTAGTTAG  
CTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCAAGATTGTGCGACGCATTTAGATTTGCTGCC  
AAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAC  
GGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGA  
GGACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCGTTAT  
AAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAG  
CGGCGTCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGAC  
TATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGC

CTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTA CTGATCGAAACGAACGAAACTGAACGTGGAC  
AAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTAT  
ATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAA  
TTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTCTGTTGAACGTGGTACCATAGACA  
CGCAGACAAAGACACCCATTGTCGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTGA CTCTTCAGG  
TTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGC  
TCCAAGTGC GACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATT CAGAAGTTTGGGAGGAGCTC  
TTGGCATTTC AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCT  
AAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGC  
GGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATT  
GTCACCATAAGCAGGGAACTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTAC  
CCCGCAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGG  
AGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAA  
GTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACG  
CAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACC  
CTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAG  
GAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTC  
ATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTG  
TGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAA  
TGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAG  
CCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGT  
ATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTC  
CACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGC  
CCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCA  
TAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGGATCGTATGGA  
CCCTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTA  
AAGTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTA  
GGGCCGTCTAGCCCTACTCATGGCCCAACAGTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAG  
GAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGT  
AGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAA  
TGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACA  
GGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGT  
AACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCC  
GCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTTGGAGGATACACAGG  
TCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATT  
GATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAAGTCCG  
AGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTG  
GGTGGAGACAGTAGGCAATCAACGCGCTT CAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAAT  
TTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGA  
CACTGGGTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCAT  
GGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCA  
TATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAAT  
CTACTTCTATT CAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCT  
TACCCGGTCAAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTG  
AATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGCAC



TCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTA TAGTTGGT  
CTAAGCACNCCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCG  
GCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGC  
AAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGA  
GCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCG  
ACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGC  
CTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCGCTTGTTAATCCAA  
GAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACA  
GCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCA  
GCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAA  
ATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTT  
ATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTCACCAAGGTTCCGGAT  
CAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTAC  
GTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGG  
CTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAG  
GCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTG  
GCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATC  
CGAATACGACCTTACACGGTCCGTGTGTAGCAGGAGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGCTCACTATTGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTAGTAGCTCAGGTGCCGGGCAAGTGCCTGAAAGTTTCTGTCCGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTAGCCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCAGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCTTACGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P23, East of England\_6, IMP-13, 07.10

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTGCCCCGTTGCAAGGAGACGGGCTCTCAGA ACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACA AACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGNTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAA ACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTTCGCGCACTGCC

TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACNAGTATGC  
CCTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGTAACAAGGGGAATCCACTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCTGCCAAAGCGTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTC  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCA  
GCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTT  
GCTCGTCAACCAATTATCCTCCTCTTTCTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATGCCA  
CGAGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGCTTTGCCTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGTTCCTGTCCTGACTC  
ACGAACATTTTTTCCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTTCATCCGACCGTTCCGGGGACACCTCATATTCCTGCCAT  
ATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGA  
CGATCCATATAATAGCGTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTAAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGTGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGCTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCATTAC  
GCGCTGCTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTCCCTCTGAGCCCCATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTCTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
ATCCCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG

ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATC  
CTAATCGTCACGCCGATGGTCTGTAAAACCTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAACG  
CGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTC  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGACTCGTGGATGCCTATCGCTTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCCTCGCGGACCGGCTTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATTGA  
CCCTTGATTAACCAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTAACCTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTNACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACGAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGCTCCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATA  
GCGCCCCGCTGGGCCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCCGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCG  
TACGGGAGAAGAATAATTTTATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAGCCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCT  
CTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACGGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGTTCATATCGTTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTNCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGCATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA

CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCC  
CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCAAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACNACATCACC  
ATGAGGATCTGTTATTCGGGCGGCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTAAGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGNTGCTCTTCGCGGAGCTAAAGANAC  
CGGGAGCGGCAAAATATTGCTTTGTATNTNACTGCGGGTATGTCGNCCATGGGGCGNNTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGANCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATNGCGGTCCCTATACCTTAGTCGGATCCTGTTCGTGGCCTATACAGAAAGCTGGGGGACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACC GGATTTTTAGTTCGCAAGTGGAAAGTGCCCTGTGAGNACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTGAGTGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCNNNNNNNNN  
NN  
CGCTCCGTA CT CGTAATATGAACAGCCGGCGTGCTCCGTAAGCTACACAAAATCTATAGGGTATTGCGCGA  
GCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGA  
CGACGGACAGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATG  
GGGTCAGAACCGCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAA  
CAGCCGACGGGTCTTTTGTAGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTCTAAAAG  
GGTCCGGAACCGACGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCANTCAATGGGC  
TCTCTGTTACAGGGCTCCGTACAATTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCC  
AGCGGCCCGACGACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTT  
CCACCGCAACAACGAGGCGACTGTGTGCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAA

GGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACG  
GGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAA  
GTCGGATGAGGTTGCCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACC  
GCTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGG  
ATGATCAGTAGCTACCGGTACGCCTCTCAGNCTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACG  
TCTCCCTAGTCTACACCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTAT  
ANACTACCCCAACATAGCATGGTAAGCACTCAAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTA  
GGCCTTCGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTG  
GGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGA  
CGCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGTGC  
CATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTC  
ACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTG  
CGTTCGCCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTT  
GTTCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGC  
GACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGGC  
CGATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGA  
GTACTACCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACG  
AAAGAGTCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCA  
AGGCGATCGGAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAA  
CTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGNCTACGGTTACATGCCTGGCTAC  
GAATGCAGTGCAGAAAAAAATAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGT  
CATCAATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCG  
AACGCAGATATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAG  
GTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGC  
AAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGTCCCAAGTAG  
CCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACA  
NCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCC  
AACTAAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAG  
GGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGAACCGGGACAATCAATTGACAAGGGG  
AAAAAGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGCGCCGCACCCGGTCTGCGCATTAGAGCATGTG  
GACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCG  
ACCAGAAGGGCGTTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGC  
CGCTTTAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGC  
TGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCAGGGAGATGTCTCAAGTCCGGGAGGGCGTCTT  
AGGAATCGCGGGTGTATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTAT  
AGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAG  
CGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTA  
CCGATGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAA  
AAACACGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGA  
ATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTGGTGGTGGACATAGATTAACACAGTGCCGCCA  
GGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCGGCAAGTGAATTAGGAGCGGTT  
TCCTCCGGACACGAAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGAC  
TGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT  
GTGTTACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACCAGACCCCAAGTACTGGTGGCGTGTGGGGTCCATTAATGAAATACGGA

CGAATCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATG  
GCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAG  
TGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAGCGGAGCAAACGGTAGGC  
GAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGCTAGGCGTAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGC  
GAGGGCCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTT  
AAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGG  
AAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGC  
AGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACGGGAGGGGAATGGAGCC  
CAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCCTCATGTAATATTAGTGTGTGTGGCGAG  
ACGGCCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGG  
GGCTGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGA  
CAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCG  
CCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGT  
AGCAGAGCAAGAAGTTGCTTGAACGACTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAG  
TGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGT  
AGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTT  
GCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAA  
TAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACC  
CGGTGAGGACTTTAATAGGCGGAGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTC  
CCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATC  
CCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCC  
GAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGG  
GCTTGCCTAGCATTGATTTTCTTTCGNTAGGCACTTCGTAGTGGGTAAGTGAACGAACGAAACTGA  
ACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCAT  
GATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTG  
TGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTAC  
CATAGACACGCAGACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGAC  
TCTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGC  
TACCCCGCTCCAAGTGCACACGTTTGGTGTGAGGTATCAAATGCTTCCACGACGATTGAGAAGTTTGGG  
AGGAGCTCTTGGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAG  
CAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAAT  
ACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCAT  
GGAAGATTGTCACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGAGACCCGGAGTT  
ATCATCTACCCCGCAGGGGGGAAAGTTTCCNGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAA  
GACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTGCACGAAGGAAGAC  
TGAGAGAAGTACGCTATCAGGAACTATGTAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGG  
GACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCC  
GTCATACTCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCA  
GTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTG  
AAAAGTTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTCCGACTCATCTGGCACCTCTAGCCCCAA  
TGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGNACGGGCAATGGCCGAGGCACGTTGGG  
AGTAAGAATGTCACATGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAAAGGATATGTATGCCACTCCCCG

GNNGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAAC  
GGAGCCCGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCA  
CCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTA  
GTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGC  
AACTGGGCATAGGAGCATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAAGTGAAGTACAAGG  
ATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTG  
ACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGA  
GATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGC  
GCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATC  
GCTGAGGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACC  
CTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTG  
GTTAAACTACAGTCCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGATGGTAAAAACCCAGGCAAAG  
AGAAACAACGTAACGATCTGGTTGGAGCTTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGA  
GGATCCGCCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGGA  
GGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTG  
GACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGG  
GGAAAGGTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAAT  
GAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACT  
AGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGA  
TAAGAGCCGACACTGGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACA  
GCTATTTTTTATGAAGCCGCTCAATAGCGGGCTTTCTTAAACGGGTGAGCTGGATTATGGCTACACCGGAGAC  
TCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAA  
TCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGGCGGGCCAGAAGGGAAGGGACG  
GTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTNAACCACGACCCCAAGTGGAGTGGT  
ACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGA  
ACAGGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCTGTCTGTTTTGCG  
GTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCA  
CATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTG  
AAGATACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTC  
CAAACCTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGA  
AAAATCTACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATT  
ACGATCTTTCTGCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTGAGTTCATCTCCTCCCG  
CTTGTTAATCCAAGAGGAGTGAAGAGCAGGCGGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCT  
ATAACACCTAACAGCAGACATTGTGCGCTCCGACGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTT  
GCCCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGA  
GGCGGTGTCGAAAATACTCTCATGTAAGAAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGATAT  
AGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCA  
CCAAGGTTCCGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGC  
ATCAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTC  
CCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAG  
GGTAGCGTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGG  
AGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTCGTTAACCAAGTAACAACAAGAA  
GCTACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGC  
TGCGAACGAAGTAGACGGCTCACTATTGATGGGTGCCGGGGNCGCGCTCACAACGGCGTGGCCTTTGGG  
CTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTA

AAGGAGCTCCCGCACTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGAC  
CGTAGGGAAATCGCGAAGTGATAGTCAGTGCAGTAGGTGTAGTCTCAGGTGCCGGGCAAGTCGCCGTA  
AAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCC  
CGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGACTGTTAGTATG  
CGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCC  
GACGCATGGTATGTATTCATCGAGGTGACAAACGGTAAAATGGGTTACGTTCCACACCGTGGGCAGTTCAT  
CGGCTACCTAGCTCGTAACGTGCGATGTACACAATAGCGAATGGTGGGTGCGTCCCTCAGGCGAAGCATCGT  
GCTACCAGCCCGGATAAGATAACCCGCAAAGAGTGCATAAAG

>P52\_2, London\_26, VIM, 02.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTACTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCTGACGCGCGCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTGAGTGCAGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTNAGTTTACAGTAAGGCACCGACAGCTTATAGCCCCGCGTGTGTCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCNATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTGTTAAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCT  
CGTACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCNATCC  
TCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG



AGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGANTAACCTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATA  
TGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGA  
GTGGCCTTGACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATNAATGCGGACTGACTCCACGCTCCT  
CCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTA  
CCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCC  
CTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACGCCACGGCCGAGCGCGTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTGCTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCCTTACTTTTGT  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTTCTTGGAGCCCCTATCCTTTCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACANCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTTGTAAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGTCTTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCCTAATAGATGTAATGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTA  
GGTTCGGCGTCTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTTCGGTG  
GGGCGCTGCGTTAGANCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGACGT  
GCCCCCTCTCGTNGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTNAATCGTCACGCCGNTGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGAC  
ATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGCGATTGTTGCTCCCTACGGTAAC  
GCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGCTCCTTCCGTAGTCTCACGACGATACCATATT  
ATTATGCCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
CTGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTA  
GTATCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGT  
TGTGACTCGTGGATGCCTATCGTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGAGC  
GCTCGGCCGACCAGGGCCCACCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTG  
ACCTTGATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCA  
GCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT

ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTGCTCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTCGTGGTGTGGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTNNCTAC  
GCCTCCCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCTTAAATCCGGGATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCCG  
TACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCNCCNCTCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTNNACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGNTGGCCAGGGTGTGTTTGTGCTGACCTCCNTCCAGATCATT  
AGCCGATACATTGAGTGGGANTCTCAACGCGCCAGGGGACNTTCTCCTATTTGGTGATACAGTCCGCAGNCT  
ACTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGT  
AGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTA  
GCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAAT  
TCTCTTTTCGCTGGAAGACCATAACGAGTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGGTGTTATTTGTA  
CTCCTGAGCAGCTGTAGAAGGTGTGCGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTT  
ACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCAT  
CCGCGTGCTCATGCCTTTATATTAGTCGAGTCAGGCTNACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCNNAGTATAAACGGCTGACTCAAGGTAGCATATC  
GAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTATTAAGTTCGGAACATCCAATGATG  
CTTTAGGTCACACGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTNCTCGCTCGATGACACTCGCA  
GTGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCA  
CCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCATGATATCTGTTAGCAATACATGG  
GGAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTATAGGATTGACCGCTATTAA  
GCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACA  
GGTNAAGCTGTGGGGTAGTTGGTAAGAATTGGATGGAGGTTGGCCCTGGTCTTTCGCCGAGCTAAAGAA  
ACCGGGAGCGGCAAAAATATTGCTTTGTATGTGACTGCGGGTATGTCGCCATGGGGCGGCTAGTCGACTCC  
TAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGANGACCTCCCATTACAACA  
ACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTC  
ACCTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGA  
GTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTATTACCATTTGTC  
CAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTANNNNNNNNNNN  
NN  
AACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTACCCTTCTAGTCACTG  
AGTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCC  
GCTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATA

ATCTTTTCAAGGCTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGC  
GCTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGGCCTATACAGAAAGCTGGGGGCA  
CCAGGGATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGA  
TCGAAGAGCGATAGAAGTGAAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGT  
CACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGG  
CCGCCGNCGGTTTTTGCCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAG  
CACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTTCGCAAGTGGAAAGTGGCCCGTGAGCAC  
TTCTCTCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCC  
CGATATTGAGCGCTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATNCAGGGT  
TCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGT  
AAAGTGGCCTGCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAG  
AGCCCAATGCACAGTGAAGCGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTG  
GCATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACA  
GTTCCAGCACATGACATTCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGAC  
CAGGTGCGAGTAGGTCCCGTTTGAATATGTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCT  
TTCCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTC  
GCTCCGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAG  
CAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGAC  
GACGGNCAGGGTCCCGGGCGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGG  
GGTCAGAACGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCGGGACGCGNGTATCAAC  
AGCCGACGGGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGG  
GTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTC  
TCTCGTTCAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCA  
GCGGCCCGACGACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTC  
CACCGCGACAACGAGGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAG  
GCTCTCGGCGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGG  
GGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAG  
TNGGATGAGGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCG  
CTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGA  
TGANCAGTNGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGT  
CTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATA  
CACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAG  
GCCTTCGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCTAGTACGTGG  
GCGCAGCCTCCAGCGTTGCTATTTGTNAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGAC  
GCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTGACGCGC  
ATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTGTACGATTC  
ACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTG  
CGTTCGCCCTGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTT  
GTTCTNTCTGGGTTGTGCGCTTGGTCTGAGGACGATGTACGTTAATTGAAATCGATATCTCGAACCCAGGC  
GACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGGC  
CGATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGA  
GTACTACCGCTACGNGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACG  
AAAGAGTCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCA  
AGGCGATCGGAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAA  
CTGTCCCGATTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTAC

GAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGT  
CATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCG  
AACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAG  
GTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGC  
AAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAG  
CCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACA  
GCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCC  
AACTAAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAG  
GGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGG  
AAAAAGCGAGCGTCTCCGCCGACCAATTGCCCTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTG  
GACCCGAATGAACGACGAGACCCCGTGAAGTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCG  
ACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGC  
CGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGC  
TGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTT  
AGGAATCGCGGGTGTATGCCCTGTGAAGAGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTAT  
AGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATANCGGTGAGGAG  
CGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTA  
CCGATGAGGAGTGCAGCGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAA  
AAACACGGAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGA  
ATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGNGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCA  
GGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGGCAAGTGAATTAGGAGCGGTT  
TCCTCCGGACACGAAACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGAC  
TGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT  
GTGTTACGGTGGTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACAGACCCCAAGTACTGGTCCCGTGTGTTGGGGTCCATTAATGAAATACGGA  
CGAATCCGATGCCGTTTCGTTACAGCAGGGGGGACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATG  
GCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAG  
TGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGTGGAGCAAACCGGTAGGC  
GAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAG  
CGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAATCAATACCCCTAAGACCAATT  
TTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAG  
GAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAG  
CAGGCAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGC  
CCAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGGCGA  
GACGGCCTTCTTCGGCACCAAGAAATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAG  
GGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGG  
ACAATTCATGCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCC  
GCCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGNGCGGGTGGTTCCATCCCGAACCGCCACG  
TAGCAGAGCAAGAAGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACA  
GCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAG  
TAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCAATTAGATT  
TGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCAACCTGACGA

ATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTAC  
CCGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCT  
CCCGTTATAAAATCCAGNCTGAAAGAGTGATCAGAGCGCGAAACAAATGACTCAGGATTCCGGCAACCGTAAT  
CCCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCC  
GAACTGACTATCATGCGAGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAAGATTCTGCACCAGG  
GCTTGCGCCTAGCATTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAA  
CGTGGACAAGAGAGATATNCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATG  
ATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGT  
GATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACC  
ATAGACACNCAGACAAAGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACT  
CTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAAGCTAGTTCAGGGAAACCGNAAGAAAACCAGC  
TACCCCGCTCCAAGTGCAGCACGTTTGGTGCTGAGGTATCAAATGCTTCACGGACGATTGAGAAGTTTGGG  
AGGAGCTCTTGGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAG  
CAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAAATGGAAT  
ACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCNCGGGGGCAT  
GGAAGATTGTCACCATAAGCAGGGAAGTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTT  
ATCATCTACCCCGCAGGGGGGAAAAGTTTCNNGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAA  
GACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGAC  
TGGGAGAAGTACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGG  
GACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCC  
GTCATAACCCCTTCGCAAAGGGAGGAATTAGCAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCA  
GTTAGCAGGAGGGGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTG  
AAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAA  
TGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACCCGGCAATGGCCGAGGCACGTTGGG  
AGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCG  
GATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACG  
GAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACC  
CGCTGGTCCACAGGANACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAG  
TAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCATGTTAAGGGAAAGTCCAACAAGTTCCGCGCTTTGCA  
ACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGAT  
CGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAATAATTCTATCACACAGTGCGTGCTTAACCGGTGAC  
GGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAG  
ATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCG  
CACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGC  
TGAGGAGTAGGGAATAAGTTTCCGCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCT  
TGTGTTAATGTGACGAGGTGAAGCGCAACNGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTT  
AAACTACAGGTCTCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCAGGCAAAGAGA  
AACACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAAGTACGCGCGGAGGG  
ATCCGCCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGAT  
ACACAGGTCCGAAGGACGAACAGCTGANAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACT  
ATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAA  
AGGTCCGAGGCGGTCCAAACGTCTCCCCTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAG  
GAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGG  
GCCCAATTTTTCGCAAGAAAGACTAAAGGTGCGAGCGGCTGGGAAGTGGATTGCGCCGTGTGGAGATAA  
GAGCCGACACTGGGTCTAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTA

TTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCA  
GGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCA  
AGGCAATCTACTTCTATTAGGGTGGGAATCNCCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTA  
TGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCA  
GATACTGAATTGCCAGGTGCAACATCGAGAGGAGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGG  
GACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTA  
GTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTC  
CCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATA  
CCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACT  
GATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGTGGGACGGAAACGAAAAATC  
TACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATC  
TTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTT  
AATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACA  
CCTAACAGCAGACATTGTCCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGA  
GAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGT  
GTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTAC  
AGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCTTGTAGGGTACAGAGTCACCAAGG  
TTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAA  
GCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGC  
TATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGC  
GTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGACAG  
CAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACG  
CTGTATCCGAATACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAA  
CGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGNCTGCTCT  
GGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAG  
CTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGG  
GAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTC  
TGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAGTGCCCGAACCC  
ATGCGATCCTTGGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCC  
ACGCAGCTGCAGGTGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCA  
TGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTA  
CCTAGCTCGTAACGTGCGATGTACACAATAGCGAATGGTGGGTGCGTCTTCCAGGCGAAGCATCGTGCTACCA  
GCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P43\_2, London\_9, VIM-2, 11.12

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCAACCTGGCGCCCCGCCGATGATC

AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCT  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCCTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTT

TACGAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTA  
GGTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTTCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTGTAAGCTCAATGAAAGGCATTCT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTTCGTTCCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTTCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTCGACCCGAGGGGTCCCGACGTACCTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGACCCACACAGGGGAAGTCCCTCCCG  
TACGGGAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCAATCATGTCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATNAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGTATCCAAAACCGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTA



CTCCAGGGTATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTT  
CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCAGCTCAC  
CTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCGNGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCGAAGTGGAAAGTGTCCCGTGAGCACTTCTCTCCTGAGT  
AGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCCCTATTCTTATCCAATTTGCGTTTACGCGTGCTGGNTAGTAAAGTGGCCTG  
CGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
GTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCCCGGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGG

GTCCTTTT GAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGCTCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAGGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCCGGCCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGCTTCGCCC  
TGACTATCGACCCGCTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGAATCGGATCGAATGAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGGCTCTGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GNGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTGCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG

TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTCCACGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTTCAGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTATTTGTTGTCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTC AATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGAAGGGTTAGGGTCTGTTAAAGTGTTC AACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGGC  
TCAGTTGGGGAACAGCGTACCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGATACGCAGTACTCTTCAGATCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTTCAGAAGTTTGGGAGGAGCTCTTGGC  
ATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGG  
CCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAAAAATGGAATACATTCCGCGGGG  
GGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCAC  
CATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGC  
AGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACT  
GCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCG

CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCC  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GACGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGGAAGTGGAGATAAAGGATCGTATGGACCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAAGTACGCGCGGAGGGATCCGCCCGCCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGGTCCGAGGC  
GGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTC  
GCAAGAAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG

CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGCCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGACAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCAATGGTGGGTGCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P1, London\_28, IMP, 04.05

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCNTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGNTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCAATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGCGCGCTTGTCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCNGTCAGCTTTGTGTGAGTGAAGGAATG  
TGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTGCAGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACNCCACCTCACTAGTTTCTGTTATATGGTTCCGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACNAAGAATGGAACGGA  
CACATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCA  
TTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAAT  
GTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCANTC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGT  
GGGCGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTG  
TCTACACTATCGCTGTTGNGGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAAC  
TTGTTTTACCACTTACTCAACTTTTGTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGA  
TCTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAG  
CCCCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACC  
CAGCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTAAACTTCCCTGCTGCGA

GCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCTTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTA  
TCCTCGATACGCAATGTAGTTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCC  
ACGAGAGGCCGTTGATTCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCGCGTTTGCCTT  
TGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCGAGTTCCCGTCCGTGACT  
CACGAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
GTGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCC  
ATATGATCTCCCGCATATAACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGT  
GACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAG  
GAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTC  
CTNCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGG  
TACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCT  
CCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCAGGCCGAGCGCGTCCAAAGAGT  
TAGCNTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCATT  
ACGCGCTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCA  
CCGACCCTACCGCACAGGGGACTATTCAAGTCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTG  
TCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAAC  
TTATAAAGGTGCGTGTTTCGGGAGGATTAGATACACGTCCCTCTTGGAGCCCCTATCCTTTCGCATACCAAACAG  
ATTAGTCAACATTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCC  
TGTTTCGGTTCCTCTTGTAAACAACAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGA  
TGGGTCCTTGCCTTCGTCGATAGCGTAAATTTCTTGGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGG  
AGCTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTG  
GTTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGC  
NTTTACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGG  
GCTATCCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATG  
TTAGGTTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCG  
GTGGGGCGCTGCGTTAGNTCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGC  
GCGATTTACCCTTGGAGCTTTCAAGAGCTAATCCCGGGGACTNCAACAGCATGAACTGTTTTAGATGCGGGGT  
GCGACAATACCGAAGCCTTGGAGCTAAACTGGCNATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCAT  
CGTTCGGTCTAAACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTG  
GCGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCC  
GGCGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCNATGTCTGATTTGTACC  
CAACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
CTGGTGAAGTCGTTGATCNCNTTGGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTG  
TATCCTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACT  
GACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGGAGATCGCCGTCGGATTGCTCCCTACGGT  
AACGCGGAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCAT  
ATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGC  
ATTCTGTGNTTCTAACCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAG  
CTAGTATCTGGGGTGAGCAGCGGCCCTCGTCCCGGTTTTTCNTGTTTCACTGTGCCCACTGACGTTTTACGAC  
GGTGTGTAAGTTCGTTGATGCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGC  
AGCGNTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCC  
ATTGACCCTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTG

CTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCC  
GTTATGTGCGAAATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTCA  
CCCCCGCCGTCGCCCATTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTTACTA  
TGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCT  
TCTCTTTCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGT  
TTCCTTANTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAG  
ATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTA  
CCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCNGTTCGTCGCCAGACT  
AGGTTAGGAACCTATCCAGTACCTCTCCGTAACCTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATAGCGA  
GCACATTAACCGCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGAC  
TTTATACGCGCCCCGCTGGGNCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGNGGCNG  
TCACTACGCTCCCTTTAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTA  
CCTTACNCACCTTAAGGCCATAGCTGTGCGCCTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGTTCGG  
GGATTCCCCGCACCGCCACGNGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGAC  
TTGAGTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTC  
CTCCTCCGTACGGGAGAAGAACTATTTNCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCC  
AGCACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCTCCAGTCTCGAATCTCCCGTTCATC  
ATGTCCTCTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACC  
CATCGAGTGTGACCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAA  
TTTTGTCCGGACAACACTCAAAAGTCGTGTGCGGGTACGACGCCCCTCAGTAAGACTCTCGCGCTTGTAGAC  
GGTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGT  
TTGACTGTAGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTNGTAGATAAA  
CGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTG  
GGATTANTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTGTTCTGACCTCCATCCAGAT  
CATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACGGTCCGCA  
GTCTACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAGCGCTGT  
GTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGNCGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGC  
ATCTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTT  
CTAATTCTTTTTGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCCAGCGGCGTGTAT  
TTGTAATCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGT  
GGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCNCGGCCATCGCTGGAGCCGCCGCTGATG  
GTCCATCCGCGTGTCTCATGCCTTTATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAA  
TCCGTTCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAG  
CATATCGAATATCCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCA  
ATGATGCTTTAGGTCACACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACAC  
TCGCGAGTGGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTCACN  
ACATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAAT  
ACATGGGGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTTTATAGGATTGACCGC  
TATTAAGCTTCTTATACACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCG  
GGAACAGGTCAAGCTNNTAAGGTAGTTGGCTAAGAATTGGATNGAGNTTCGGCTNGTGCTCTTCGCCGAGCT  
AAAGAANCCGGGAGCGGNAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTNGT  
CGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCAT  
ACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAGGCGTTG  
GCACGTACCTCACCCGGTGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACT  
CTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTAC

CATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTG  
TACGTGCCCCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGA  
ACACCTACAAAGAAGGAACCCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCCTTAGTCACTGA  
GTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCG  
CTTTTTGGGCTCTAGATTTGGGGGCTCCNCGTTCTGCGCGGTATAGGCCAGGAAGTTTGAGCATAACGATAA  
TCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCG  
CTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCAC  
CNGGGATTGCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGAT  
CGAAGAGCGATAGAAGTGAAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTC  
ACTGGTGAACGCTTCGGGTGCCGNAGGAGTGNAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGC  
CGCCGCGGTTTTTTCGCAATTCTACGGGACGCACCGGCGTGTGTACCGTTTGACCCCATGATGGGGAAAGC  
ANGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCTGTGAGCACT  
TCTCTCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCC  
GATATTGAGCGCTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTT  
CTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTA  
AAGTGGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGA  
GCCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGG  
CATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAG  
TTCCAGCACATGACATTCCGCCACAAGCTCTGCCACNCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACC  
AGGTGCGAGTAGGTCCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTT  
TCCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCG  
CTCCGTAATATGAACAGCCGGCGTGTCCGTAAGCTACACAAAATCTATAGGGTATTGCGCGAGC  
AAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACG  
ACGGACAGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGG  
GTCAGAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACA  
GCCGACGGGTCTTTTGTAGTCCGCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTGTTAAAGGG  
TCGGCAACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCT  
CTCGTTCAGGGTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAG  
CGCCCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGTAAAGGGGTTCC  
ACCGCGACAANGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGTAGGTTCCACGCCCAAGG  
CTCTCGGCGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGG  
GACAGCAGATCGAACTCAGACTCGGACGCAAGCAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGT  
CGGATGAGGTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCTTGAATCTGTACCGC  
TATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGAT  
GATCAGTAGTACCGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTC  
TCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATAC  
ACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGG  
CCTNCGTACGGTGTATGTGTAAGTGGGCCGCTTATCTGGGCGACTAGGANTGCCAGAACCCCTAGTACGTGG  
GCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCGAGTCGGGCCCGTATTACCAACGAC  
GCAGACCAAAGAGGGTCTCGGGTAGAGCGCTGAACCTTTGGGTGAGAAGATCGTGTAAACCCCTGTNAGTGCC  
ATACCCCAAAGAGTTCAATNACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTC  
ACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCGAAAGCACGCGTG  
CGTTCGCCCTGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATNATGTCCAGTATACCCTCCTT  
GTTCTCTCTGGGTTGTGCGCTNGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGC  
GACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCC



CGATGTCATATAATAAAAACGAGACCGGGCCCTACAGTTGTCGTNAAATGGACTTATACTCGACCACGCTGCGA  
GTACTACCGCTACGNNGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACG  
AAAGAGTCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCA  
AGGCGATCGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGANCTTAA  
CTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTAC  
GAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGT  
CATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCG  
AACGCAGGTATCGTTCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAG  
GTGTAGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAANAATCGC  
AAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAAGTGTACGTCNTACCTACCAAGCGGTCCCAAGTAG  
CCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACA  
GCCTGGCCGTATACACTTAAGTTCAGATCGTGNCCAAGAGCNCGGTACGTCCCCCGATGCCGAACCCAATCC  
AACTAAATATTTAACGCCACGAACCGCTNCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAG  
GNAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGNNGGCAACCCGGGACAATCAATTGACNAGGGG  
AAAAAGCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGCGCCGACCCGGTCTGCGCATTAGAGCATGTG  
GACNCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCG  
ACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGC  
CGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGC  
TGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTT  
AGGAATCGCGGTGATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTAT  
AGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGCGAGGAG  
CGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTA  
CCGATGAGGAGTGCAGCGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAA  
AAACACGGAGAGGGTGGGACGGGCGGCTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGA  
ATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCA  
GGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTT  
TCCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGAC  
TGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT  
GTGTTACGGTGGTGGCCAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGA  
CGAATCCGATGCCGTTTCGTTANAGCAGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTAT  
GGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCA  
GTGAATACCTGCAGACGGATTGCGCACGCTTTGATCATGCCGTCCGGCCAACAAGCGGAGCAAAACGGTAGN  
CGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGCTAGGCGTAAGTGCGGCGGAAGGTGTCTTAACGTTGCNAGGGACCTGAGC  
GAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTT  
AAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACANNGTGGCGAAAAGGCAACAACAGG  
AAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGC  
AGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCC  
CAGANCATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCCTCATNTAATATTAGTGTGTGTGGCGAG  
ACGGCCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGG  
GGCTGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGA  
CAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCG

CCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCATCCCGAACCGCCACGT  
AGCAGAGCAAGAAGTTGCTTGTAACTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAG  
CGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGT  
AGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTT  
GCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAA  
TAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATNACC  
CGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTC  
CCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATC  
CCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCC  
GAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCATGCCCTTTATAGGAGAAAAGATTCTGCACCAGG  
GCTTGCCTAACATTTGATTTTCTTTGCTTAGGCACCTTCGTAGTGGNTACTGATTGAAACGAACGAAACTGAA  
CGTGGACAAGAGAGATNTGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATG  
ATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGT  
GATGAAATTGACGAAGCTCNTTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACTGGTACC  
ATAGACACGCAGACAAAGACACCCCATTGTCGTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACT  
CTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCT  
ACCCCGCTCCAAGTGCAGCCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGA  
GGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGC  
AATGTCCTAAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGANTGAGAAATGGAATA  
CATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATG  
GAAGATTGTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTA  
TCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAG  
ACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACT  
GGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGNGCCTAAGAACGAGCCCAGGATGGG  
ACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCG  
TCATAACCCTTCGAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCA  
GTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTG  
AAAAGTCCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGGCGACTCATCTGGCACCTCTAGCCCCAA  
TGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGG  
AGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCG  
GATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACG  
GAGCCCGTATTCTAGATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACC  
CGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGNGACGGGGAGGCGACGCTTAGATGTAG  
TAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTCCGCGCTTTGCA  
ACTGGGCATAGGAGCATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAACCTGAGATACAAGGAT  
CGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTNACCAGTGAC  
GGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAG  
ATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCG  
CACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGNAACAAGATATTGCCAGCGGATCG  
CTGAGGAGTAGGGAATAAGTTTGGCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCTT  
TTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGT  
TAAACTACAGGTCCCTAATGCTTCTGCTCGCAGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAG  
AAACAACGTAACGATCTGGTTGGAGCTTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGG  
GATCCGCCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGG  
ATACACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGA

NTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGG  
AAAGGTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGA  
GGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAG  
GGCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGCAGTGCGCCGTGTGGAGATA  
AGAGCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACGGC  
TATTTTTCATGAAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTC  
CAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATC  
CAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGT  
TATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCAGTGGAGTGGTACC  
CAGATACTGAATTGCCAGGTGCAANATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACA  
GGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCTGTCTGTTTTGCGGTA  
CTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACAT  
CTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAG  
ATACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAA  
ACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAA  
ATCTACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTTTTGTTATTACG  
ATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTT  
GTTAATCCAAGAGGAGTGAAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGNCTATA  
ACACCTAACAGCAGACATTGTGCGCTCCGAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCC  
CGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGC  
GGTGTGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAG  
GTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACC  
AAGGTTCCGATCAGGCAACCAGGTCAAAGACGTCTACGGCGCCCATGGGTAAGCGGTAATCCGTCAGCAT  
CAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGANTTCCC  
TAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGG  
TAGCGTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAG  
GCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGC  
TACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTG  
CGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCT  
GCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAGA  
GGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCTACCGTATAAGTGAGACCG  
TAGGGAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAA  
GTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCAACAAGGCGAGGAAACAAGTGAGTGCCCG  
AACCATGCGATCCTTGGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGCCACTGTTAGTATGCG  
AGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGA  
CGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCG  
GCTACCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCTTACGGCGAAGCATCGTGCT  
ACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P4, London\_1, VIM, 10.07

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC

TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCAATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATG  
TGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGTGCGTGCAGACTGCCTTTGAGTGCAGCAGTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCNTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCTGCCAAAGCGTTTAGCCAAACAAATG  
TGTGTTCTNCGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTC  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTT  
GTTTTACCACTTACTCANCTTTTAGTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCA  
GCCGATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCCGGGTAAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAG  
CTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTT  
GCTCGTCAACCAATTATCCTCCTCTTTCTTTAAGGAGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTGGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCA  
CGAGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGCTTTGCCTTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAAGCGGGTCCGGTGCAGTTCCTGTCCTGACTC  
ACGAACATTTTTTCCGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCA  
TATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTG  
ACGATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAAGCGGGCGCATCACGGGTNGGAG  
GAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTC  
CTCCTCGCAGGTAATCTTTCCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGCTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTT  
AGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATNGCTAAGATATCCATT  
ACGCGCTGTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCA  
CCGACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTG  
TCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAAC  
TTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGGAGCCCCATCCTTTCCGCATACCAAACAG

ATTAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCC  
TGTTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGA  
TGGGTCCTTGCCCTTCGTCGGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGG  
AGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTG  
GTTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCT  
TTTACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGG  
CTGTCCCTAATAGATGTAAGTGCATCAGAGTGTCTCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGT  
TAGGTTGCGCGTCTGAGTTTACTCGCAACCAATCACGGGCTTTAAACCCTGCGTATCCTCCAAGGCGTTTCGG  
TGGGCGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCG  
CGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTG  
CGACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATC  
GTTGCGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGG  
CGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCG  
GCGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGATCC  
AACGCCCTNGCCTGCCCTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTGTAC  
TGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGT  
ATCCTTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCCATCTTATCGATACCCGCACTG  
ACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTA  
ACGCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTCTCCGTAGTCTCACGACGATACCATA  
TTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCA  
TTCTGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGC  
TAGTATCTGGGGTGAAGCAGCGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCACTGACGTTTTACGACG  
GTTGTGTAAGTCGTTGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC  
GCGCTCGGCCGACCAGGGCCACCCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCAT  
TGACCCTTGATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGT  
CAGCGATGCTATTCTACGTTGCTCCCGGGTGAAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGT  
TATGTCGAAATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACC  
CCCCGCCGTCGCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATG  
AGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTT  
TCTTCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACNCGGCGGACAGAGAATGTCGGTTT  
CCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGAT  
AAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACC  
ATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTGCTCCCGACTAG  
GTTAGGAACCTATCCAGTACCTTCCGTAACCTGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGC  
ACATTAACCGCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTT  
ATACGCGCCCCGCTGGGCCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGCGGTCA  
CTACGCTCCCTTTAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCT  
TACCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGA  
TTCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGA  
GTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGNAGTCTCC  
TCCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCA  
CACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCTTTATCCCCTCCAGTCTCGAATCTCCCGGTACATCATGT  
CCTCTGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATC  
GAGTGTGACCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTT  
GTCCGGACAACACTCAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGG

TAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTG  
ACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGA  
GTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGA  
TTAGTCGTGCCCCNGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCAT  
TCAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAATC  
TACTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTG  
TAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCT  
AGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAA  
TTCTCTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGT  
ACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCT  
TACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCA  
TCCGCGTGCTCATGCCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGT  
TCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATAT  
CGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGAT  
GCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCTCGCA  
GTGGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCA  
CCATGAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGG  
GGAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAA  
GCTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACA  
GGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGNAGGTTCCGGCCTGGTCTTTCGCCGAGCTAAAGNA  
ACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTGCGCCATGGGGCGGCTAGTCGACTCC  
TAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACA  
ACGGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTC  
ACCTACCCCCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGA  
GTTGCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTATTTACCATTTGTC  
CAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCTTCTAGTCACTGAGTACGATA  
TTTGATAGTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGG  
GCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTA  
CATCCATGGCGTCCCTATACCTTAGTCGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGACCCAGGGAT  
TGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCAAAGAG  
CGATAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GGTTTTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCT  
GAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTG  
AGCGCTTAAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTCTGCGCT  
GCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGG  
CCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAA  
TGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGG  
GTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAG  
CACATGACATTCCGCCACAAGNTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGC  
GAGTAGGTCCCGGTTTCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTCTCTATA

CTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTANAATCACCTCCACGTTCTGCCTCGCTCCGT  
ACTCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAGTA  
ACGACAGAACGAATACCGGGCAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGG  
ACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCA  
GAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCG  
ACGGGTCCTTTTGTAGTCCGCCCGACACCGTGCGGAGGATCCGAATTTGTCTCTGTCTGTCTAAAAGGGTTCGG  
CAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCG  
TTCAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGC  
CCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAAAGGGGGTTCCACCGC  
GACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTC  
GGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACA  
GCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGA  
TGAGGTTGCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACNGCTATTC  
TGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCA  
GTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCT  
AGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTA  
CCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGGCCTTC  
GTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGAC  
CAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGTTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCC  
CCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAG  
AGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCCTTCG  
CCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTC  
TCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGG  
CAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTC  
ATATAATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTAC  
CGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGT  
CCCCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGAT  
CGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCC  
GATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGC  
AGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAA  
TAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCA  
GGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAG  
CGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGA  
GGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACG  
GCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATNTGGCNGTTACAGCCTGG  
CCGTATACTTAAGTTTCAAGTTCAGATCGTGACCAAGAGCCCGTACGTCCCCCGATGCCGAACCAATCCAATA  
ATATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAG  
GAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAA  
GCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCG  
AATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGA  
AGGCGCTTCGATGTGAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGCCGCTTT  
AAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATA  
CGAAGTAACGCCTGTGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAA  
TCGCGGGTGTGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTC

AGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTG  
TAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGAT  
GAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACA  
CGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAG  
GTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGACATAGATTAACACAGTGCCGCCAGGGGT  
CCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCC  
GGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAG  
CGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
ACGGTGGTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGG  
CGACGCAAAGAAACCGAGACCCCAAGTACTGGTGGCGTGTGGGGTCCATTAATGAAATACGGACGAAT  
CCGATGCCGTTGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTC  
CAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAAT  
ACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAAACGGTAGGCGAGGA  
ACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
ACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTAT  
GTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGC  
TGCCGATTGCCGCTGCTAGGCGGAAGTGGCGGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGG  
CCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAG  
CCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAG  
CTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAAC  
ATGGCTATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCC  
TTCTTCGGCACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCNCTATCTAGGGGCTGG  
TAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTC  
ATGCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTAT  
GAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGA  
GCAAGAAGTTGCTTGAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACA  
GCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAG  
CTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTAAAGATTGTCGCGACGCATTTAGATTTGCTGCC  
AAGAGTATGAGGGTGGGACGGCAAGGTTAGGGTCTTAAAGTGTTC AACGCCGAACCTGACGAATAAAAC  
GGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGA  
GGACTTTAATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTAT  
AAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAG  
CGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGAC  
TATCATGCGAGGGGGGAGGCAATCGTCTCCTCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGC  
CTAGCATTTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGAC  
AAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTAT  
ATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAA  
TTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACTGGTACCATAGACA  
CGCAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGG  
TTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGAAACCGCAAGAAAACAGCTACCCCGC  
TCCAAGTGCACCGCTTTGGTGTGAGGATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTC  
TTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCT  
AAGGCCAGTGGCATTAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGC  
GGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATT



GTCACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTAC  
CCCCGAGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGG  
AGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAA  
GTCACGCTATCAGGAACTATGTACGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACC  
CAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACC  
CTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAG  
GAGGGGCGGAAGAGTCCATACCCTANTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTC  
ATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTG  
TGCGGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGNAAGAA  
TGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAG  
CCTCTGGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGT  
ATTCTAGATGTAAAGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTC  
CACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGC  
CCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTGTCAACTGGGCA  
TAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGANNTACAAGGATCGTATGGA  
CCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTA  
AAGTCTCTGCACTGGATGGCGGTGCGCTAAGTGGAAATAGGCGACGTACACTGTACGGGGAGATAAAGTA  
GGGCCGTCTAGCCCTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAG  
GAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGT  
AGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAA  
TGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACA  
GGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGT  
AACGATCTGGTTGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCC  
GCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGG  
TCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATT  
GATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGGTCCG  
AGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTG  
GGTGGAGACAGTAGGCAATCAACGCGCTTACAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAAT  
TTTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGA  
CACTGGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCAT  
GGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCA  
TATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATATAAATCCAAGGCAAT  
CTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCT  
TACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTG  
AATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGAC  
TCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGT  
CTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCG  
GCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGC  
AAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTGATGCTNCAAATGATGG  
AGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCC  
GACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTG  
CCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTGAGTTCATCTCCTCCCGCTTGTAAATCCA  
AGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAAC  
AGCAGACATTGTGCGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACC  
AGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGCAA

AATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCT  
TATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGA  
TCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTA  
CGTGGGTGCCCGGTGCCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCG  
GCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAA  
GGCCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTT  
GGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTAT  
CCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGTATGAGGCTGCGAACGAAGT  
AGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTA  
AGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAGAGGAGCTCCCGC  
ACTTACTGGCCGTAATAACGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCG  
CGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCGGA  
CAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATC  
CTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATAACCGCAAAGAGTGCATAAAG

>P50, London\_9, VIM-2, 01.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTGCGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCTTCCGCAACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGCTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCCGAGTCCGACCCCATCATCTCAACTTGT

TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCNACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCACGTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCTGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGGCCCTATCCTTTCGCATACCAAACAGAT  
TAGTACCCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCCTAATAGATGTA CTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCTGATGTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGT  
GGGCGCTGCGTTAGATCGAACGNTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGGTGC  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTGAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGGAGATCGCCGTGGATTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTGTAAAGCTCAATGAAAGGCATTC

TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACACTGTGCCACTGACGTTTTACGACGGTT  
GTGTA CTGTTGATGCCTATCGCTTTTTTTCTTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCCTCCCCCAATATCTTCTCCATTGA  
CCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTA ACTCGCTGGTGTGCGGCTTCCCTGCCA ACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATA  
GCGCCCCGCTGGGCCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCTTTAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCG  
TACGGGAGAAGA ACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTGTTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGTTCATATCGTCTTACGCGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTGCTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTCTCGCCGAGCTAAAGAAAC

CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCNCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGTCCCGTGAGCACTTCTCTCCTGAGT  
AGAGCCCATCAGTCCGATCACGTNCCGATCTGAATCTTGCTAGACGCGCCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAACGCATCCAGGGTTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTG  
CGAACGTGAGATGGGCCCGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
GTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGCTCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAGGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCNTATTACCAACGACGCAGACCA  
AAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCNTAACCCCTGTCAGCGCCATACCCC

AAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAG  
CCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGCTTCGCC  
CTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTC  
TGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCA  
TATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
GCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCG  
ATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCA  
GTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCGA  
GTATCGTTCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC  
GGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAAT  
ATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGAACCGGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGNTGGCGCCATCTGTCGACCCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAA  
GTCAGCGACCAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATC  
GCGGGTGTGCCCTGTGAAGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAG  
GCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTA  
GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGA  
GGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACG  
GAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGAGAAGTTGGCGAGGACCTTGTGTGTTAC  
GGTGGTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCG  
ACGCAAAAGAAACCAGACCCCCAGTGAAGTGGTCCGCTGTTTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTGTTACAGCAGGGGGGACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGCGGAGCAAACCGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAC  
ATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCC  
ATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG

AAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTTGGGACCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCATCAGAAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA  
AGAAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGA  
GAGCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGC  
AAGAAGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT  
AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTGGGACGGCAAGGGTTAGGGTGTAAAGTGTTCACGCCGAACCTGACGAATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCT  
AGCATTTGATTTTCTTTGCTTAGGCACCTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGCATGATAGTATAT  
GGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACG  
CAGACAAAGACACCCCATTTGTCGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTACTCTTCAGATTC  
CAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCC  
AAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTCCACGTACGATTCAGAAGTTTGGGAGGAGCTCTTG  
GCATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAA  
GGCCAGTGGCATTAAAAAATATCTCGACCCGGTGGGCGGAGAAAAGAGTGAAAAATGGAATACATTCCGCGG  
GGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTC  
ACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCC  
GCAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTGCACGAAGGAAGACTGGGAGAAGTCA  
CGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAA  
GCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTC  
GCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTGATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGG  
CGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCT  
CTGACGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGT

GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGCC  
TAAGAAAAGCGATACCTCGAGTGTAGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCCGAGACNCCAGGCCGCATAT  
TCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTA  
CTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTAC  
CCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCCACTGGAGTGGTACCCAGATACTGAATT  
GCCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAACGAAAAATCTACTCCGACG  
GGGGGATCCCTCAAATCCGCACGCAGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGACAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P41, London\_28, 09.12



TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGNCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATG  
AGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGCGATCTTGTCTACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTT  
TGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATG  
TGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCT  
CGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCATGTCCAGGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGT  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGAT  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCA  
GCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAG  
CTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGTTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTT  
GCTCGTCAACACATTCATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTAT  
CCTCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCA  
CGAGAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGTTTTGCCTTT  
GCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCTGCTCCGTGACTC  
ACGAACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAG  
TGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCA  
TATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTG  
ACGATCCATATAATAGCGCTTCTCTGTCCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTCCGAGG  
AGTGGCCTTGTACTAGGGCGCCCACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCC  
TCCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCTGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTT

AGCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCATTA  
CGCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCAC  
CGACCCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTNTATCCCCTTGTCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGA  
TTAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCT  
GTTTTCGGTTCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCTTGCCTTCGTCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCCGTTTGG  
TTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTCTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTTCCGGGC  
TATCCCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGTATCGT  
TCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCG  
TGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCCTTCTCGCGACAACACACACTCCGGC  
GCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAA  
CGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTG  
GTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAATCCGCGATTACTATTGAGTGAT  
CCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCGCATCTTATCGATACCCGCACTGAC  
ATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAAC  
GCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCTCGACGATACCATATT  
ATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
CTGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTA  
GTATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGT  
TGTGTAAGTCGTTGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAGC  
GCTCGGCCGACCAGGGCCCACCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTG  
ACCTTGATTAATAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCA  
GCGATGCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTA  
TGTCGAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCC  
CCGCGTGCACCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTTACTATGAG  
TAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCT  
TTCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTGGGTTTCT  
TACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAA  
TTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATT  
GCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTTCGTTCCCCAGACTAGGTT  
AGGAACCTATCCAGTACCTCTTCCGTAACCTGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACA  
TTAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATA  
CGCGCCCCGCTGGNCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTA  
CGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGTCCCGACGTACCTTAC  
CCACCTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGTTCGGGGATT  
CCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTC  
ACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCTCTCC

GTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACA  
CGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCC  
TCTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTGTGTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCANGCTGTAAGGTAGTTGGCTAAGAATTGGANGGAGGTTCCGGCTGNTGCTCTTCGCCGAGCTAAAGNAAC  
CGGGAGCGGCAAAATATTGCTTTGTATNTNACTGCGGGTGTGTCGCCCATGGGGCGGCTANTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCAC  
CTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACACCAGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCNAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCGAAGTGGAAAGTGCCCTGTGAGCACTTCTCTCCTGAGT  
AGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAACGCATCCAGGGTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTG

CGAACGTCAGATGGGCGGCAACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGTCCGTACTC  
GTAATATGAACAGCCGGCGTGCTCCGTAAGCTACACAAAATCTATAGGGTATTCCGCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCTGTACTCAACTCAGCCGNAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGNGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCAAGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTCTAAAAGGGTCGGCAAC  
CGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACA  
ACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTTCCACGCCCAAGGCTCTCGGGC  
CAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAG  
GTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTTTGAATCTGTACCGCTATTCTGGA  
TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTAC  
GGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCCGATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTGAGTGCATACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAGCTGTGCATCCGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA

ACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAACAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTATCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAAGTTCACCGATGAGGAGAGTTCATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAA

TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGG  
GGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACCTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGTTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGTGGCACGTTGGGAGTAAGAATGTCAC  
ACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTG  
GCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGA  
GCATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTC  
AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
GTTTAGCCCTTACTCATGGCCACCAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTGGCCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCC  
TAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCCGCTAA  
GAAAAGCGATACCTCGAGTGATAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATAACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAAGGGAAAAGTCCGAGGCGG  
TCCAACGTCTCCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGC  
AAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAACTGATTACAGCTATTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCCCTCAGACAACGTCTAACACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTNGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTCGAATTGGATTAGGGCGCCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG

GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P58, London\_29, 09.13

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGCGCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGCGAGGGTCTTTCTCGTCTATTCCGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT

GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCTAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTTGTTTACCCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTANTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCCGCCCCCTCTTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCGAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCTCTACTTCACCGTACGATTGTTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTACCCTGGCTGCTCTGTTTCCGGGGCTATC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTTAATGTCTGATTTGTACCCAACGCCCT  
AGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAAG



TCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTAAT  
CGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGTTTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGTGGTGTGCGGTTCCCTGCCAACTATTGTAATGGCGAGCACATTA AAC  
GCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTC  
NCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGTCCCAGCTACCTTACCCACT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTACAGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCTCGTACGG  
GAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTCA  
GCCGGAGCGTGTTCCTGTATCATGCTATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCCGGAC  
AACACTCAAAGTCTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTATCCCAAACCGTTTTCTGATGACTCGTTTACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTGTTCTGACCTCCATCCAGATCATTACGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTATATCGTCTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTNTCTTTTC  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGACTCCTGAGC  
AGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCCTATTAAGTGTCCGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT

GCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGC  
TGTAAGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGNTGCTCTTCGCCGAGCTAAAGAANCCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGNTAGTCGACTCCTAGAATAA  
CACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGGTCCC  
GGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCCCGTCACCTCACC  
CCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAA  
ACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACA  
TTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCCCTCGCC  
CATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAG  
GAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGAT  
AGTTCATAGGCATGTATAACCTACGCACCCNAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTT  
TACTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATG  
GCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGG  
CAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGA  
ACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTTC  
GGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTG  
CGCAATTCTACGGGACGCACCCGCCNTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGAC  
GGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCTGTGAGCACTTCTCTCCTGAGTAGA  
GCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTT  
AATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTCTGCGCTGCGAAGAG  
TTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGGCCGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCACGTGCTCCATTTGGCATTGGGTGGTACGA  
AACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCACGACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT  
CCCGGTTNGAATATGTTAACTTTGAAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAICTGTAA  
TATGAACAGCCGGCGTGCTCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACNGGCGAGGCTAGTCGTCTGTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTC  
NCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCG  
ATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCC  
TTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTCGGCAACCGAC  
GGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGC  
TCCGTACAATTGGCGATCTCATCTGTCGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGAC  
GGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGGACAACG  
AGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCCAAGGCTCTCGGCGCAG  
TGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACNTCTCGCTCGGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG

CCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTAAGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGTGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGNTCCTCTCTGGGT  
GTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACA  
GGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
TGGCCCATTTCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGCTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCNGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAAC  
GCCANNAACCGCTTCACAAATGGACCTGCAGACGATTGAGCTTGAAGTACCCCAAGGGAAGGAGCAGTA  
AATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGT  
CTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACG  
ACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTC  
GATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCG  
GACCAAAAGATAGGGACCAAGTAGGTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAAC  
GCCTCTCGAAAATAGTGAAGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTG  
ATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTCGGG  
CCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAG  
ACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGC  
GACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGG  
GTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTC  
AAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTG  
CGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAA  
ACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGC  
AAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTG  
GCCAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCGACGCAAA  
AGAAACCAGACCCCACTGACTGGTGGCGTGTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGT  
TCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTC  
TTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGCAGAC  
GGATTGCGCACGCTTTGTATCATGCCGTGGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTA  
GCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGAT  
GGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGA

CGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGAT  
TGCCGCTGCTAGGCGGAAGTGC GGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACC  
CCAGCTAGAGGTGCAAAGCGCGTACGGTTACGTGAAATCAATACCCCTAAGACCAATTTTAAAGCCATTATT  
TGGTAGTCGCGACAGAGAACTGTCTNGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAA  
AAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGA  
AGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTAT  
TATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGC  
ATCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCCGTATGAGAGCCCA  
CGGGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCAAGATTGTGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATNNGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCGGCAACCGTAATCCCGACAGCGGCGTTAG  
TTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCG  
AGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
GATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTGGACAAGAGAGAT  
ATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGG  
GGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAG  
CTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTA  
GAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAACCCTTCGCAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGTAGCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCACTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGA  
GACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAACCTGAGATACAAGGATCGTATGGACCCTCAA

GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAGCGTGTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTACGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACCGGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTGCAACCCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAGTGAAGTCCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA

TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P36, West Midlands\_5, VIM-2, 06.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTACTCGTACTAA  
GACATTTAACAACACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCNG  
GTCAGATGGGTCAAGGGTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCTAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCATCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCTCGCTATAGGCGCGCCTAAGGCTCGACCAGC  
CGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTATCCTC  
GATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTATACATCGCCACGAG  
AGGCCGGTTGATTAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGCGGTTTTGCCTTTGCGG  
GAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGACTCACGA  
ACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTTGTAGTGTT  
ATCACGCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATATG  
ATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACGA

TCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTTCGGAGGAGTG  
GCCTTGTACTAGGGCGCCCACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCTC  
GCAGGTAATCTCTTTCGGTAGTAATGGAGTGCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCCG  
TGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTGA  
GACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAGCTT  
ACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAGCATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCCGGGAGGATTAGATACAGTTCCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGATTAG  
TCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTTTCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAATAGGTCAATGTCTGATTTGTACCCAACGCCCT  
AGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAAG  
TCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGATCCTTAAT  
CGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTATGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTTCACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGANCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACAGTAATACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTCGTCTGGGGTTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC

CCGCCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTTCATCATGTCTCTCGAGC  
CCCGGCTTCTAGACGATAGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTTCCTGTATCATGCATGCTCCCCGCTCTGCGGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGANTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCNTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCNNNNNNNGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCGAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAGTGGACGT  
GCCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGNANNNGNTGGANNNNNNCCNNGTNNTCTTCGCCGAGCNAANNAANCNN  
NNGCGNNAATAATTNCTNNNNNGTGACTNNGNCATCCTCAATTGGCCAAATAATNCNAGANNNNNNTAG  
AATAACACGCGCCGACGTTTTGGTGAACCGTTAAGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACG  
GTCCNGAAACCTTGTGGTAGTCGGGAGGAGCATGCGGGTGGACCGCCTACCAAGCGTTGGCACGTCACC  
TTACCCCGGTGCGCTTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCGAGTT  
GCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGCTACTCTGTGTACCAGGGGGTATTTACCATTGTCCAA  
TCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
TCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAA  
GAAGGAACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTT  
GGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAAATCTCCCCGCTTTTTGGGCT  
CTAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAAGATAATCTTTTCAAGG  
CTTTTACTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATC  
CATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCA  
CGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGGCCTGGGATCGAAGAGCGAT  
AGAAGTGAAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTNTGTACTGGTGAACG  
CTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTT



TTTGCGAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCT  
GACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCTGAGT  
AGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACAAACGCATCCAGGGTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTG  
CGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTC  
GTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTTCGCCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCCAAGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAAC  
CGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTNCACCCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTGGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACNCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGTTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGCTATACTACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTAAGTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCTCA  
AATAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTGATCGGGGACTAGAGAGAANTATATGCCTACGGTTACATGCCTGGCTACGAATGCAG  
TGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATA  
ATCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGG  
TATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCG  
AGAGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAG  
GGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGC

GGGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAT  
ATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCCGGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCAAGTGCCGACCCGGTCTGCGCATTAGAGCATGTGGACCCGAA  
TGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGCGCCATCTGTCCGACCAGAAG  
GCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTAA  
GTCAGCGGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACG  
AAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTTCGGGGGGCGTCTTAGGAATC  
GCGGGTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAG  
GCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTA  
GAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGA  
GGAGTGCACGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAG  
GAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGT  
TGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTCTGGACATAGATTAACACAGTGCCGCCAGGGGTCC  
GTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGG  
ACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCG  
CACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTAC  
GGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGC  
ACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCC  
GATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGGTTTCGTTACGCCAGTGAATAC  
CTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAAC  
AAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAAC  
ATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGT  
CATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTG  
CCGGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCC  
AATACCCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCC  
ATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCT  
GGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAG  
AAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACAT  
GGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTT  
CTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTA  
AGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCAT  
GCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCCGTATGA  
GAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGC  
AAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGC  
GAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCT  
AAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCAAGATTGTGCGGACGCATTTAGATTTGCTGCCAA  
GAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGNATAAAACGG  
CAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGG  
ACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAA  
AATCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCG  
GCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTA  
TCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCSCCT

AGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTGGACAA  
GAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATAT  
GGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTAAGTGTGATGAAATT  
GACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACG  
CAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTT  
CCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTC  
CAAGTGCAGACGTTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTTGGGAGGAGCTCTT  
GGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTA  
AGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCG  
GGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTG  
TCACCATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACC  
CCGCAGGGGGGAAAGTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGGA  
GACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAG  
TCACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGC  
AAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCC  
TTCGCAAAGGGAGCAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGCTAGCAGG  
AGGGGCGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCA  
TAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGT  
GGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAAT  
GTCACACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGC  
CTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCAGCCGAACGCCTGATTGGTAACGGAGCCTGTA  
TTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCC  
ACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGGCAGCCTTAGATGTAGTAGGCAGCC  
CTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCAT  
AGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGAACTGAGATAACAAGGATCGTATGGAC  
CCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAA  
AGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAG  
GGCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCCTACGAGGCTAATCGCACCCCTGCGCACCGAAGG  
AAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTA  
GGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAAT  
GTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAG  
GTCCTAATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTA  
ACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCC  
CCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGT  
CCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTG  
ATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGA  
GGCGGTCCAACGTCTCCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGG  
GTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATT  
TTTCGCAAGAAAGACTAAAGGTGAGCAGGGCGCTGGGAAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGAC  
ACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATG  
GAGCCGCTCAATAGCGGGCTTTCTTAACGAGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGCAT  
ATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCCCTACATCATAAATCCAAGGCAATC  
TACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTT  
ACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCAAGTGGAGTGGTACCCAGATACTGA  
ATTGCCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACCGCAACAGGGACGACTC

GGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTA CTAGTTGGTCT  
AAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGC  
ATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAA  
GGAACCCCTCTCTGAATTGGATTAGGGCGCCCTAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGC  
CGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGTGGGACGGAAACGAAAAATCTACTCCGAC  
GGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCT  
GGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGA  
GGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGC  
AGACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGC  
AGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAAT  
ACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTAT  
AAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTCACCAAGGTTCCGGATCA  
GGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGT  
GGGTGCCCGGTGCCGCAAGTGGGTTGATGTGTCTGGGACTCCTTGTCACGACTTCCCTAGCTATCCGGCT  
GTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGG  
CCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGG  
CTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCC  
GAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTGTGATGAGGCTGCGAACGAAGTA  
GACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTCTCTGTCCGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCCTTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P39, London\_29, 08.12

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTGCCCCGTTGCAAGGAGACGGGCTCTTCAAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACNAGTGACTCATACTAA  
GACATTTAACAAGTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCGCTTACCGCCCCCAGTTTTGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGGTTGCCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC

TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCTAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCTTGTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGC GCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCGCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGC GCAATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCGAGTTGTGCTTGGTATTGGGGGCGGTCCTCTACTTCACCGTACGATTGTTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATCTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTCCCTCTTGGGCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATATCACCTCTTTCAGGTTCTTTCGTGCCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATNTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCNCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTATC  
CCTAATAGATGTAAGTGCATCAGAGTCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGTGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA

TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCCCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTTAATGTCTGATTTGTACCCAACGCCCT  
AGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGTCAGAGTTTGTACTGGTGAAG  
TCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAAT  
CGTCACGCCGATGGTCTGTAAAACACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGCCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCATAATACACGTA ACTACTAGCTTACTGAGTTTGCACCGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTTCGTCGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTACCTTACCCACCTT  
ANGGCCATAGNTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTNAGTCACGAC  
CTCGATNGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACG  
GGAGAAGA ACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTG  
GCTAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCG  
ACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGT  
CAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGG  
ACAACACTCAAAAGTCGTGTGGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAAT  
TTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGTTTTTCTGATGACTCGTTTGACTGTAG  
GCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGT  
CCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCCCTGGGCCATCCAGCTGGGATTAGTCG  
TGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTAGCCG  
ATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCA  
GGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGG  
CGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGG  
TAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTT  
TCGCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGA  
GCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTG

CCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCCGCTGATGGTCCATCCGCGT  
GCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTTCCGCTC  
TGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGNCTGACTCAAGGTAGCATATCGAATAT  
CCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCTCATTAACTGTTCCGAACATCCAATGATGCTTTCA  
GGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCGCAGTGGAC  
GTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGA  
GGATCTGTTATTTCGGGCGGCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCC  
TTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAA  
GCTGTAAGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTNGTGCTCTTCGCCGAGCTAAAGANNCCGGG  
AGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTANTCGACTCCTAGAAT  
AACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTC  
CCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCCCGTCACCTCA  
CCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCT  
AAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCA  
CATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCG  
CCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCNACAAAGA  
AGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGG  
ATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTTAACCTTCTCCCCGCTTTTTGGGCTCTA  
GATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTT  
TTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCAT  
GGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCAGGGATTGCACG  
GCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTT  
GCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAGTGCCCTGTGAGCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTGAGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGGCAAGCNCAGCTCTCTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGGTTTGAATATGTTAACTTTGAAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATC  
TGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGTA  
ATATGAACAGCCGGCGTGTCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAG  
AACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTC  
CCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTTCAGAACGCCG  
ATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCC  
TTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGAC  
GGACTGACGCGGGGGGGATATTACCATTTGTGGACCGGACATAGCCATTCATGGGCTCTCTCGTTACAGGGC  
TCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGAC  
GGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGGACAACG  
AGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAG

TGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAAGGTGTAGGGATTACNTCTCGCTCGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGTGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTT  
GTGCGCTTGGTCTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGGCAGCCGGGCAATACA  
GGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAAT  
AAAACGAGACCCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
TGGCCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAAC  
GCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCAGTAA  
ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGAATTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCG  
ATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGG  
ACCAAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACG  
CCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGA  
TGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGC  
CGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGA  
CTAATTCCTGANACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCG  
ACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGT  
GGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
AGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCG  
TGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAAC  
CGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAA  
GTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGC  
CAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCGACGCAAAAG  
AAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTT



GTTACAGCAGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTT  
ACACCCTGCCCGAACCGCATCCGGGGAGCCGCTGCAAGCGCGTTCGTTTCAGCCAGTGAATACCTGCAGACG  
GATTGCGCACGCTTTGTATCATGCCGTCCGGCAACAAGCGGAGCAAAACGGTAGGCCGAGGAACAAAGTTAGC  
TATCCATGATATTGGTGGTTGTAATGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCCAAANATCGGATG  
GGAGGATACGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATT  
GCCGCTGCTAGGCGGAAGTGC GGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGAGCCAATACCC  
NAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATT  
ATGAGGGATCCGCTCTATTGGGACCCTCTCATGTAATATTAGTGTGTGGCGAGACGGCCTTCTTCGGC  
ATCAGAATTTTGTTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCCA  
CGGGGAATCCTCGCCTGCGTGTGTGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGAACGACTGCACCGATGAGGAGAGTTCAATTGACCAATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCGGCAACCGTAATCCCGACAGCGGCGTTAG  
TTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCG  
AGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
GATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATTGAAACGAACGAAACTGAACGTGGACAAGAGAGAT  
ATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGG  
GGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAG  
CTCATTGGGACAAATATGAGGGGAGGGCACCTGTGAGGTTGTTGAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAATAGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTTCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGACGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGNGAGAAATGGAATACATTCCGCGGGGGTA  
GAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTATAACCCTTCGCAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGA

GACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAAT  
AAGTTTGCCGCATTCTGGCGCAAANTCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACG  
AGGTGAAGCGCAGCGTGTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGNTTAAACTACAGGTCCCT  
AATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCCCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGG  
TCAAACGTCTCCCCTTCTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGC  
AAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTAAGAACTGATTACAGCTATTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAAGCGACAGACCCCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAACCCCTGTCTGTTTTGCGGTAAGTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGACGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACCGGTGCGGTGTGTAGCAGGAGTTGCGAGGCTTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA

CTGGCCGTA CTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGT CAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATT CAGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTT CACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P31, Wales\_1, VIM-2, 11.11

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTT CACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGT CAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGTGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTCTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCCGAGTCCGACCCCATCATNTCAACTTGT  
TTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
TAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCC  
ACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGC  
CGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAAC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCT  
CGTACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGCTCCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG

AGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGC  
GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCTGATTCTGGGTGCGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATNAATGCGGACTGACTCCACGCTCCTCC  
TCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCAGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACG  
CGCTGCTGTCGACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCG  
ACCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTAT  
AAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGGAGCCCTATCCTTCCGCATACCAAACAGATTA  
GTCACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTT  
TCGGTTCCTCTTGTAACAACAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGG  
GTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGC  
TACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTT  
TGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTT  
ACGAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTG  
TCCCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAG  
GTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGTGG  
GGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGA  
TTTACCCTTGAGCTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGA  
CAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTC  
GGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTG  
CCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGC  
TCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACG  
CCCTAGCCTGCCCTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGT  
GAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAATCCGCGATTACTATTGAGTGTATCC  
TTAATCGTCACGCCGATGGTCTGTAATAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACAT  
CAGTGCTTCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGC  
GGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTTCCGTAGTCTCACGACGATACCATATTAT  
TATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCT  
GTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTATGGCCCCGGCCTTACTAGCCTGCATAGCTAGT  
ATCTGGGGTGGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTG  
TGACTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGAGCGCGC  
TCGGCCGACCAGGGCCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGAC  
CCTTGATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGC  
GATGCTATTCTACGTTGCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGT  
CGAAATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCG  
CCGTGCCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAA  
ATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGACGCGATCTTAGCTGTGCCCTTCTTTTC  
CACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTAC

TCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTT  
AGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
CTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTCGCCAGACTAGGTTAG  
GAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATT  
AAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGTCCTACTAC  
GCCTCCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCCACCTGGACTTGAGTCA  
CGACCTNGATCGGTCAAGCGAGGGGTACCCTCTGCACATTTTCTTGACCCACACAGGGGAAGTCTCCTCCCG  
TACGGGAGAAGAACTATTTTCATGTTTCGCCGTACNCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTGAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTTTTTTGTTCTGACCTCCATCCAGATCATTC  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCNTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCATGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG

GCTTTTTACTTGGACTCCCTATTGTGTCCTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCGGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCTACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTNCCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGTCCCGTTCCGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCATAACGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCGGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTGAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGCGACA  
ACGAGGGCAGTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGTAGTCCCACGCCCAAGGCTCTCGGGC  
CAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAG  
GTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCCTTGAATCTGTACCGCTATTCTGGA  
TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTGTCTATACTACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTAC  
GGTGTATGTGTAAGTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCGTATTACCAACGACGACAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACCTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCTGTGACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCC  
TGACTATCGACCCGCTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTGCGTGAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCCACTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT

GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTANCGGACCAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTCTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCAGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTTGTGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC

CTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTGCCTACCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATGGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCA  
GACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCC  
AATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCA  
AGTGCAGCACGTTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTTGGGAGGAGCTTTG  
GCATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATAAGGATGGTGTCTAACAGCAATGTCCTAA  
GGCCAGTGGCATTAAAAAATATCTCGACCCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGG  
GGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTC  
ACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCC  
GCAGGGGGGAAAGTTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA  
CGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAA  
GCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCT  
CGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTGATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGG  
CGAGTCCANGAGTCTCCACCAGTCTAAAGGAGGAACGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAAAGGATATGTATGCCACTTCCCGGATGAGAGCCT  
CTGGCGACGCCCCGAGGAAACCATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGCAATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTTTAAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
CGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGA



GCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATA  
CTCTAATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTCCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P5, London\_26, VIM, 01.09

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTNACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCNGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGNATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCNGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTCTACCCGACTATCTATTCGTCGCGNTTACCGCCCCCAGTTTTGCGCCTCTACCGAGC  
TTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCNATAAACTCTCCAACGGGCCTTGAGTGAAC  
AGAGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCCGGCGCTTGCCCCA  
CCGCCCTACTCNGTCGCCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATGA

TCAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCC  
GGTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGC GTTACATTGGTATGTTGGCACGCATGGTC  
CTGTAGCCCAATCCTCTAAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAAGGAAT  
GTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCCTCTCGAAGGGTCTTCT  
AAGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGNAGACTGCCTTTGAGTCGCGCACTG  
CCTCAGTTTTGCCACCTGCGGTCNNTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTNGTAT  
GCCCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACNCCACCTCACTAGTTTTCGTTATATGGTTCCGN  
TTCTGGCTGCTCTNGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACG  
GACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGNATCCGCTTCCCTATTGCCNTANTGGT  
GCATTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACA  
AATGTGTGTTCTACGCCGGGAGCTAGGCAGATTTCCCGTCGGGTACGGCGCATTCTTGACCTCAANATTAAC  
CTGCTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCA  
ATCCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGNGTTGATCATAATTGC  
GTGGGCNCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCTCGGCGCTACCAACCGCCCAATTCTTCCGCT  
TGTCTACACTATCGCTGTTGCCACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCA  
ACTTGTTTTACCACTTACTCAACTTTTGTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGCTCTG  
GATCTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAAT  
AGCCCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTNGATA  
CCCAGCCGATCTGGATCTCCATTACATTAACNGNNTATGCNTTTTTCCATTTGCACATGAGCACANCCATCAG  
GTTAACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTG  
CGAGCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCANATATAGGCGTGCC  
ACAGGACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTG  
CGGTTGNTCGTACCACATTCATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCCGCTATAGGCGCGCTAAGG  
CTCNACCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCC  
CGCTATCCTCGANACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACA  
TCGCCACGAGAGGCCGGTTGATTCAGTATCCAANCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGGTTT  
GCCTTTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCG  
TGACTCACGAACATNTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGGT  
TTGTAGTGTTATCACGCTCGCCATGGACTAACTTCGTANCCTCATCCGACCGTCCGGGGACACCTCATGTTT  
CTGCCATATGATCTCCNCATATTAACACTCCTCAGCTCGNAAACACTGTGGCACAGTCCGTNAGCTAGTATC  
CCGGTGACGATCCATATAATAGCGCTTCTCTGTCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGT  
NGGAGGAGTGGCCTTGTACTAGGGCGCCCACTCCGACTCTGGGACGTCTNATNNATGCGGACTGACTCC  
ACGCTCCTCCTCGCNGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCACGCTTACTTAC  
GGAGGTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCC  
CAGCTCCCTGAGACGGCGAGACNCGTGAGGCAGGCCACNGCTTACGTTTAGACCACGGCCGAGCGCGTCCA  
NAGAGTNAGCTTACCGAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGNNGATTGCTAAGA  
TATCCATTACGCGCTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAA  
GCTGACCACCGACCCNCCGCACAGGGGACNNTTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTC  
TACTTTTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATCTTCCATACCGCAAATCGTCATTTAGC  
TTTGCTAACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACAGTTCCTCTTGAGCCCCCTATCCTTCCGCAT  
ACCAAACAGATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTNG  
TTCGCATCCTGTTTCGGTTCCTCTTGTAAACAACAGATACGCTANTTGTGCGCAACGCCATCCTATAACGCAG  
TAATCGGGATGGGTCTTGCCTTCGTCCCAGTAGCGTAAATNNCTTGAGGCNACAGGCACTGCCTACAGATTA  
CTAATGATGGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTCGT  
GCCCGTTTTGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACNGTCTCGATGCNAGGCCCACTGCAT

CCACTATCGCTTTTACGAGAGTAATCATTGTTACACTATTGGNTTGGCGCGCAGCTTCTACCCTGGCTGCTCT  
NGTTTCCGGGGCTGTCCCTAATAGATNTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCNTGCACTATG  
TCGTAGATGTTAGTTTCGGCGTCGTAGTTTTACTCGAACCAATCACGGGTCTTTAACCTGCGTATCCTCCA  
AGGCGTTTCGGTGGGGCGCTGCGTTAGATCGAACNCTCCCCACTAACCCCTCGAACACAAGCTAGTCTCTCCA  
TTCTAGGCGCGGATTACCCTTGAGCTTCAAGAGCTAATCCCGGGANTNCAACAGCATGAACTTGTTTTA  
GATGCGGGGTGCGACAATACCGAAGCCTTGAGCTAACTGGCNATAAGATTAACGATCTTCCATCACGATTG  
GTCACTCGCATCGTTTCGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTT  
CTTCCGCTTGACGTGCCCCCTCTCGTNGCGTTTATTCTGGGTCTGCGCTTCTCGTGCCCTNCCTCGCGACA  
ACACACACTCCGGCGCTCATTGCGGCGTGGCCCTATGGNTCCGACGCCGCTACTTAANAGTAGGTCAATGTC  
TGATTTGTACCAACGCCCTAGCCTGCCCTTGTAGCCGTCACTTAATCCTNAGGGCTNAGCANNCTGTGCGCC  
AGAGTTTGTACTGGTGAAGTNGTTCGATCATCACTTTGANAATAGCATTGCTCNATTCACAAATCCGCGATTA  
CTATTGAGTGATCCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGA  
TACCCGCACTGACATCAGTGCTTCCCCTGTACGCCGANTTTCTGCACAANGCTTGNGATCGCCGTCNGNNTTG  
CTCCCTACGGNACGCGCAATACGANCGACCAAATTAAGCCCTGACCAGAGTNGCTCCTTCCGTAGTCTCAC  
GACGATACCATATTATTATGCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCT  
CAATGAAAGGCATTNCTGATTCTAACNCTNGTGACNNGACGACTGTCACAGAGTGATGGCCCCGGCCTTAC  
TAGCCTGCATAGCTAGTANCTGGGGTGAGCAGCGCCTCGTCCCGGTTTTTCNTGTNTCNACTNNGCCCACT  
GACGTTTTNCGACGGTGTGTACTCGTGGATNCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAAT  
GGAGGGGGTGCAGCGNCTCGGCCGACCAGGGCCACCCTCGCGGACCNGCTTNGTGCTGCGGCCCTTCCCC  
CAATATCTTCTTCCATTNACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGT  
ACGCGCTCTCTTGTCTAGCGATGCTATTCTACGTTGCTCCCGGGTGANCGGTGGCCACGCGATCTACCCAAGT  
TTTGTACAGATCCGTTATGTCGAAATCCCATTAAATACAGTAACTACTNGCNTACTGAGTTTCGACCGGCGGC  
TCACGACGCTTACCCCCCGCGTCGCCCACTTGAAGGTGGCGCANCCTCTACAGAGGCTCTTGTCTGGGGTT  
CCCTCCCTTNACTATGAGTAAATGTACCANTAATCAGTGACGCCATTGGAGGTACGGATTTGCNNGCACGGAT  
CTTAGCTGTGCCCTTCTTTCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTNCNCCGNCGGA  
CAGAGAATGTCGGTNCCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGT  
ATGNCCGGGTCAAGATAAATTTAGATTTAACGTAAGANGGATGCCAGACATAAACNAACTGTCATCGTAAAC  
GTGCTGACAAAATTACCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTC  
NGTTCGTCGCCAGACTAGGTTANGNACCTATCCAGTACCTCTTCCGTAACCTCNCTGGTGTGCGCTTCCCTGCCA  
ACTATTGTAATGGCNGCACCATTAAACCGCTGGGTAAGGCGCAACTTGNGGAAGTGTGTTGCGGGCGNTCG  
ACACCGGCCGGGGGACTTTATACGCGCCCCGCTNNGNCNGTCCCCGGAGAGCGNATAGCTCCTCATAACCC  
TGCAGCCACGCGGGCGGTNNCTACGCCTCCNTTTCAGACCCTCTCGTAAATGCTGGGGANTCTCCTTTGACCC  
CGAGGGGTCCCAGCTACCTTNNCCNNNNTAAGGCCATAGCTGTGCGCCTTAANTCCNGTATTTGTCCNC  
CCNCGANGTCTCGCTTCGGGATTCCCCGNNCGCCACGTGTGGANCCANNGAANCCTAGGCGTGTCTGC  
GCGCCTTGGCCACCTGGACTTGAGTCACGACCTCGATCGGTCAAGCGAGGGNTANCCCCTGCACATTTCTN  
TGACCCACACAGGGGNAGTCTCCTCCGTACGGGAGAAGAACTANTTTTCATGTTTCGCGGTACCCTACGTGCA  
TCAGGCTCGCNGGCTCTGCCAGCACAGTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCTCC  
AGTCTCGAATCTCCCGGTCATCATGCTCTCGACCCCCGGCTTCTAGNNGATNGGNTATTCTAAGAATCAGC  
GGTGGCCCTCCATCACGGCCACCCATCGAGTGTGACCGGAGCGTGTNTCCTGTATCATGCANGCTCCCNCT  
CTCGCGGTGGCACGCGGAACCAATTTGTCCGGACAACACTCANAAGTCGTGTGCGNGGTACGACNCCCCTC  
AGTAAGACTCTCGCGCTGTAGNCGGNTAACAAATTTGACCCATCGNTGGGACCACTTATTACTACAGTGATCC  
CAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCCNCTTCTACCTGCGCTCCGACTCTTGGANNAGTCTC  
CTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATNCTGCAGTTATCCGC  
GCCATGTTCTGGGCCATCCAGCTGGGATTANTCGTGCCCGTGANGCTTCTTCCCGCCAGTGTTGGCCAGGG  
TGTTTTGTTCTGACCTCCATCCAGATCATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCANGGGACCTT

CTNCTATTTGGTGATACAGTCCGCAGTCTANTCCAGGGTATTTGGACCATCAAGTCGCCGTCACAAAGAAATA  
CCATAANCACCCCCAAGCGCCTGTGTGTAGTGGNCGCTCTGTTTTAGTAGCTTCATATCGTNGTTCAGCNGG  
CACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAGTGTACNNGCCATAACCCCTGTGCGACATGAGCAC  
CCATGCCAAAGAGTGCTAAAGCTTTTNAATTCTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGC  
TGGCATGCCCCAGCGGCGTGTATTTGTA CTCTGAGCAGCTGTAGNAGGTGTCGGTGTGATGAAGAACCC  
GTCCCGTGGATTGGGCGGCGNTAGTGGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTTGCCCCGG  
CCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGTCTATGCCCTTTCATATTAGTCGAGTCAGGCTCTACT  
GGCAGCGNTTTCTTTTACTACAACAATCNGTTCNGCTCTGNTCCTCCTAGTCTGCGTNTNNTNNTNCTTATGC  
ACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATNNCNT  
CTACCCTCATTAANTGTTCCGAANATCCAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGA  
CCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACC  
GGCGCTTATTCCGTGNTACCTTACTCACAAATCACCATGAGGATCTGNTATTCGGGCGGTCCTGNTAGGCT  
GTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATCTTTGGTACTTTACGNATTCCTGCTNNTAGA  
AATTTTACAGCGGTTTCATAGGATTGACCGNTATTAAGCTTCTTCATACCACCTCCTACCCTCATATTGATCTCC  
CCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCTGTNGGNNAGTTGGCTAAGAATTGGATG  
NAGGTTCCGGCTGGTGTCTTCGCCGAGCTAAAGAAACNNGGAGCGGCAAAATATTGCTTTGTATGTGACTG  
CGGGTGTGTCGCCATGGGGCGGCTAGTGCAGTCTAGATAAACACGGCCGACNTTTTGGTGAACCGTTAA  
GGCGGGTCTGNGGAGGAAGACCTCCATTACAACAACGGTCCCGAAACCTTGTGGTAGTCGGGNGAAGC  
ATGCGGGTGGACCGCCTACCAAGCGTTGGCACGTACCTACCCCGGTGCGGCTCTACGGCGATCGTCTAC  
TGCCAGGTGCCGTACCNGCGGGGACACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGCNAGGGTTTTGGTG  
CTACACTCTGTGTACCAGGGGGTATTTANCAATTTGTCCAATNACATTCCGCTGGCCCCCATCTATCGGCAGT  
TGGTCCAGNNGGCTCCCATGATTACGTGTACGTGCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGT  
GGCCATCTTNNATATCCAGCCTAGANCCGNACACCTNNAAGAAGGAACCACCGCAAGTTGCGTGACGGTC  
GGTGCTCCCTCAGTCAACCTTCTAGTCACTGAGTACGATATTTGGATAGTTCATAGGCATGTATNACCTANGCA  
CCNGAGTTNCAANTCCNCAACCTTCTCCCCGCTTNTTGGGCTCNAGATTTGGGGGCTCCCNGTCTGCNCGC  
NTATNGGCCAGGAAGTTTGAGCATAACGATAATCTTTTCAAGGCTTTTTACTNNGACTCCCTATTGTGTCACTG  
CGGGCCCTTCTTATGGCTCCGGTCTGAGCGGCTGTCTACATCCATGGCGGTNCCTATACCTTAGTCGGATCC  
TGTTCTGGCCTATACAGAAAGCTGGGGGNACCAGNNATTGCACGGCAGCGCGANGNGATGNCCAGGGGC  
ATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCNATANAACCTGAGCGGAATTACAATACGTCT  
CTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAG  
ATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCNNGNTTTTTGCGCAATTCTACGGGACGCACCGGCG  
TTGTGACCGTTTTGACCCCATGATGGGAAAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAANC GGATTNTT  
AGTTGCAAGTGGAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCCCATCAGTCCGATCAGTNC CGAT  
CTGAATCTTGGCTAGACGCGCCNATACGTTCCCGANATTGAGCGCNTTAATCNATNCCCACCTTTGCCGTGNA  
TGCTGTCCNTATGCCACCAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCNGTTCCTATT  
CTTNTCCAATTTGCGTTTCNGCGTGCTGGCTANTAAAGTGNCTGCGAACGTGAGTGGGCCGCGCACTGCAA  
CTAATGTCCTAATCCTNACGGTTGGGCTTCTCANAGCCCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCC  
CGGGGAGGGACGCGNGTCCACGTGCTCATTGGCATTGGGTGGTNCGAAACCGCACTNNGCNNNCGCAGC  
TCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCCGCCACAAGCTCNGCCACTC  
GCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCGGTTGCAATATGTTAACTTT  
GGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTNTCCTATACTCAATCTGAATNTTCTCTNAGCGAGGATT  
ACAGCGCTNGTGTATAATCACCTCCACGTTCTGCCTCGCTCNGTACTCGTAATATGAACAGCCGGCGTGCGCC  
GTAAAGCNACANAAATCTATAGGGTATTCGCCGAGCANNNTAACGACAGAACGAATACCGGCGAGGCTAN  
TCGTCTGTCTACTATCCTGTACTCAACTCAGCCGNAGACGACGAGGAGGTCCCGGGCGGGAGATGGCGTGC  
AATCCTCGTACCGAGAAGTCGNAAGANTCACCGTATGGGGTCAGAACGCCGATAGNNGCGCCNANTGAAGN

CCCAAGGTGNTTGGATAATCCCGGACGCGNGTATCAACAGCCGACGGGTCTTTTGTAGTCCNCCCGCGACN  
CCGTNGCGNGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGACTGACGNCGGGGGGG  
ATATTACCATTGTGGACCGGACATAGCCANTCAATGGGCTCTCTCGTTCAGGGCTCCGTACAGTTGGCGATCT  
CATCTGTTCGNAGGGGTTGAGGATTACTGAGCGCGGAGCCNCGGCNCGACGACGGATCGGTGTGATNGA  
CGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGGACAACGAGGGCGACTGTGTGCGAGTA  
GATCNNNCAGATGNNGNAGTGCTAGGTCCCACGCCCCAAGGCTCTCGGCGCANTGCNACATGTCACCATAG  
GCAACCCGCTTNGTGGACGTANANGCAGAAAGNCGACGGNACAGCAGATCGAACTCAGACTCGGACG  
CAAGCNCAAGGTGTANNGATTACATCTCGNTCGGGGGGCAAGTCGGATGAGGTTGCCCGAGNNCAANNCCC  
GACAGTAATTTCCANAGNCAAACNCTCCTCTNGAATCTGTANCGCTATTCTGGATAGGAAGGAAGTACGAAC  
TAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGNTGNTCAGTANCTACGGGTACGCCTCTN  
NNNCNATGNNGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTNCGCGACTGAAAGCG  
GGTGTGCAACGTATAGGCCGTAGAGGATCTACGGCGTCGTCTANACACTACCCCAACATAGCATGGTAAGC  
ACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCNNNCGTACGGTGTATGTGTACTGG  
GCCGCTTNNCTGNNGANTANGAATGCCAGAACCCCTAGTACGTGGGNGCAGCNTCCAGCGTTGCTATTTG  
TNAGCCGCATAGGAGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAGAGGGCTCGGGTA  
GAGCGCTGAACTTTGGGTCAGAANATCGTCGNAACCCCNCGTCAGNGCCANANNCCAAAGAGTTCAATNAC  
CCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGCCCTACCCACATCGG  
GCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGNGTGC GTTCGCCCTGACTATCGACCCN  
NGTGCNANNNNCAAGCANCCCCGNNAATCATGTCCAGTATAACCTCCTTNGTTCCTCTCTGGGTTGTGCGC  
TTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAANCCAGNCGACCGGNCAATANAGGGGAC  
AAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACNTACTTGNCCGATGTCATATAATAAAACG  
AGACCGGGCCCTACAGTTGTCGTNAAATGGACTTATACTCGACCAGNTGCGAGTACTACCGCTACGTGGCC  
ATTTCCCACTGGCACAGNCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGGN  
CTTCAAGTTGACNGTCAAAGTCCGGCNNTTGGCTACTANAGGACCATGCAAGGCGATCGGAGNNNCNTT  
NNNNCGGCTCTTNCAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCATTCAAAGA  
ACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTNCATGCCTGGCTACGNATNCAGTGCAGAAAA  
NAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCA  
GCTGGAACAGGGNNGGCAAATTACGAACATCNGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTC  
CCTATCGCACATGNCCGACTTACCATTATGTCACAAGGANGATGTCAGACCCCGAGGTGTAGCGAGCGAGC  
GGGAATCGGATCGAATGAAAAAGCTGNGCATCCGGAAACACCGTCNTAAGAATCGCAAATTGAGGGCGCTG  
ANAGCCATCCACTGCCGTGGCAAGTGTNCGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGAT  
AATAGGTGTAGGANCGACAAGCCAANTGGGGCTTCGGACATTGANGTGGCNGTTACAGCCTGGCCGTATAC  
ACTTAAGTTTACGATCGTGACCAAGAGCCCNGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAAC  
GCCANGAACCGCTTACAAAATGGACNTGCAGACGATTGANCTNGAGCGTACCCCAAGGGAAGGANCCGTA  
AATAACCAACAGTAGAAAAACGACCTAGNNGCAACCGGACAATCAATTGACAAGGGGAAAAAGCGANCNT  
CTCCGCCGACCAATTGCCTTCGNGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGNATGAAC  
GACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCT  
TCGATGTGCAGAAGAGATCATCCCTGTATTAGTNAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAG  
CGGACNAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATNACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGNGGGGGNGTCTTAGGAATCGCGG  
GTNATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCNAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GNGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATNCNNGTGAGGAGCGCTGTAGNG  
GAAGACTAATCCTGANACGCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATNCTACCGATGAGGA  
GTGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTNGGTA AAAACACGGAG  
AGGGTNGGACNNGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCANGAATCAGGTTGA

TGTCNAAGTACNCGTAGACCAACNGNGGTCGGTGCTGGACATAGATTAACACAGTGCCGCNAGGGGTCCGT  
AGGTGCGTGACCTACAGCGAGAAGNTCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCNTCCGGA  
CACGAANCCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGC  
ACTAGCAAGTATGACCGATAGNGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACG  
GTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCNA  
CGCAAAAGAAACCAGACCCCCAGTGACTGGTGCCGTGTTTTGGGGTCCATTAAATGAAATACGGACGAATCCG  
ATGCCNTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCCTGGCCATAGGAGAGGCTNTGGCGTCCA  
ATTAGGTCTTACACCCTGCCGAACCGCATNCGGGGAGGCCGCTGCNNGCGCGTTCGTTACGCCAGTGAATA  
CCTNCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGNCCAACAANTGGAGCAAAACGGTAGGGCAGGAA  
CAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGNNGGCAA  
ACATCGGATNGNAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTNAGAAACNTA  
TGTCATNGACGGGGTAGACCAAGCAAGCTCCNNGGAAGCGAGCCAAGTANAACAGCCCTNAGGGCCAAG  
CTGCCGGATTGCCGCTGCTAGGCNGAAGTGCGGCGGAAGGTGTCTAACGTTGCNAGGGACCTGAGCGAGG  
GCCAATACCCAGNTAGANGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTAAAA  
GCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGNCGAAAGGCAACAACAGGAAAA  
GCTGGCGAAAAGNCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGC  
AAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCANN  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATNTAATATTAGTGTGTGTGGCGAGACGN  
CNTNNTTCGGCACCANAATTATTTGTTGTCGGACGTTAATCAGCNTCGTGAAGGCACGCGCTATCTNNGGGC  
TGGAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAA  
TTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGGTACAACGCCGCCG  
TATGAGAGCCCACGGGGGAATCCTCGCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGC  
AGAGCAAGAAGTTGCTTGTANCGACTTGCACCGATGAGGAGAGTTNAATTGACCAGNATGATGCCACAGCGT  
ACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTNCGTCTGGCGCGGACAGAAGTAGT  
TAGCTAAGCTGTGGTGNATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCT  
GCCAAGAGTATGAGGGTGGGACGGCAAGGGTTANGNCGTTAAAGTGTTCACGCCGAACCTGACGAATAA  
AACGGCAGCCTGCAAGCATTATGNGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGNCAGGCATTACCCGG  
TGAGGACTTTAATAGGCGGAGGTCTGCTGACTCACTTANCGCAGGATACGATTGGAGGGCGGAAATCTCCCG  
TTATAAAATCCANGCTGAAAGAGTATGATCAGAGCGCAACAATGACTCAGGATCCGGCAACCGTAATCCCG  
ACNGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTNTATTCTGCCCATACGCTTGTGGGGATCNGNCGAA  
CTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCT  
TGCGCCTAGCATTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGT  
GGACAAGAGAGATNTGCGGACGAGACGAGAAGCGCTTNNCGTTGCAAATTCGGCGAAAGGCGGNCNTGAN  
AGTATATGGGGCGGGNTGAGGGAAAATGTAGCANGCTTCTGCGGCTAGTNGCCCTTAGGCCGTGACTGTG  
ATGANATTGNCGAAGCTCNTTGGGACAAATATGAGGGGAGGGCACCTGTCANGTTCGTTGAACGTGGTACC  
ATAGACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACT  
CTTCAGGTTCCAATGGCTGCACATGTATAANTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGC  
TACCCCGCTCCAAGTGCGACCAGTGGTGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGG  
AGGAGNTCTTGGCATTTCANGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAG  
CAATGTCCTAAGGCCAGTNGCATTAAAAAATATCTCGACCGNGTGGGCGGAGAAAGAGTGAGAAATGGAAT  
ACATTCCGCGGGGGGTAGANCAGCGAGNAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGGCAT  
GGAAGATTGTCACCATAAGCAGGNANNTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTT  
ATCATCTACCCCGCAGGGGGGAAAGTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAA  
GACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGAC  
TGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGG

GACTCAACGCNAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCC  
GTCATAACCCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGNATGGGACCTAAACTC  
NGTTAGCAGGAGGGGCGGANNAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCNT  
GAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCA  
ATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGG  
GAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCANAACAAAAGGATATGTATGCCACTCCCC  
GGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCANCCGAACGCCTNATTGGTAAC  
GGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACNA  
CCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTA  
GTAGGCAGCCCTCCANTTGTGANAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGC  
AACTNNGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATAACAAGG  
ATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTG  
ACGGAAGTTAAAGTCTNTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGG  
AGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTG  
CGCACCGNANGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGAT  
CGCTGAGGAGTAGGGAATAAGTTTGCCGCATTCTGGNGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCAC  
CCTTTGTGTTAATNTGACGAGGTGAAGCGCAACGNITGATTGGGTTGCGATCAAAAAGGTGATGGTACCT  
GGTTAAACTACAGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAA  
GAGAAACAACGTAACGATCTGGTTGGAGCTCTGCTATACTGNCAAATGACTCACCTTTNAAAGTACGCGCGG  
AGGGATCCNCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTANNTGTTGG  
AGGANNCACAGGTCCGAAGGNCGAACAGCTGACAGTGCAANCACTATTGGCCCCCAATNACCAATCTAGCT  
NGANTATACCATTGATCGCAAATAACAANCAANGTTTCAGTTCCGATAAAGCCCCAACGATGATGGCTTGCAG  
GGAAAGGTCCGAGGCGGTCCAAACGTCTCCCCTCGTGGTAACTGTACCCAGGATCCNTCTCCCCCTCGTA  
ATGAGGAGTGTGGGTGGAGACAGTAGGNAATCAACNCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAG  
ACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGNTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGG  
AGNTAAGAGCNGACACTGGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATT  
ACAGCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGA  
GACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATNCTCAGCTGGTAGAGCGGAGACCGACTACATCAT  
AAATCCAAGGCAATCTACTTCTATTAGGGTGGGNATNCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGG  
ACGGTTATGATACNTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCACTGGAGT  
GGTACCCAGATACTGAATTGCCAGGTGCANNATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACG  
CGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCNNTNTGTTTT  
GCGGTACTANTTGGTNTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGNGTGCAGCAGAGTAGC  
TGCACATNTCCCTCNGGCATCGAGAAGGGCGGTTGGCGCGTGACTIONTAACTGANAAGTGGTCACTCTA  
GCTGAAGATACCACGCAAGGAACCCCTCTCTCGNATTGGATTAGGGCGCCCCNAGCGGGACACTACGTTGA  
TGCTNCAAAGTATGGAGCCGGGATAGAAAAANAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGA  
AACGAAAAATCTACTCCGANGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCCACTCTT  
GTTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTC  
CTCCCGCTTGTTAATCCAAGAGGAGTGAGAGNAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGT  
NTGNCTATAACACCTAACAGCAGACATTGTGCGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCAGCAG  
ACGTTTGGCCGAGAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCT  
AATGAGGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCT  
GAGATAGGTACAGCGTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAG  
AGTNACCAAGGTTTCGGATCAGGCAACCAGGTCAAAGACGCTACGGGCGCCCATGGGTAAGCGGTAATCC  
GTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCA

CGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTT  
TGATAGGGTAGCGTCAAAGGCCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTT  
CTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAAC  
AAGAAAGCTACGCTGTATCCGAANNCGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGA  
TGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGNC  
NTTGGGCTGCTCTGGACTAAGGGCAAAGGAATGGACCCGTACGATNTGTGTGGAGGTGCTCTCTAAGCAAC  
GACTTAGAGGAGCTCCCGCACTTACTGNCCGTAATAACGGACGAGACACAATTCTCCCTCCACCGTATAAGT  
GAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGNC  
GCCGTAAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCNCCTAACAAAGGCGAGGAAACAAAGTG  
AGTGCCCGAACCATGCGATCCTTNGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTT  
AGTATGCGAGNCACGCAGCTGCAGGTGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGG  
GGTCCCGACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTNCACACCGTGGGC  
AGTTCATCGGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAA  
GCATCGTGCTACCAGCCGCCGATAAGATAACCCGCAAAGAGTGCATAAAG

>P30, South East\_2, VIM-2, 10.11

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGCTGGAAAGCTATATAGTTGTCCTTCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT



AACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCTAGACGTTTAGTTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAATGATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGTGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGGATGGTCTGTAAAATATCGGGACCCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT

GATTA AAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCGTCCCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTA ACTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGA ACTATTTTCATGTTTCGCGGTACNCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGCTTCTAGACGATAGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTTCCTGTATCATGCATGCTCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCGTGTCGGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGATGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGTTCTGACCTCCATCCAGATCATTAGCCGANA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTCTAATTCTTTTTCG  
CTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTCTCGAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGC GTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA

CTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCNGCTTTTTGGGCTCTAGA  
TTTGGGNGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTT  
ACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATGG  
CGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCNTTGTCACTGGTGAACGCTTCG  
GGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGC  
GCAATTCTACGGGACGCACCCGGCTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACG  
GATCCAGTCGNCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAG  
CCCATCANTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTTA  
ATCTATTCCCACCTNTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGT  
TGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGGCCGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCACGTGCTCCATTTGGCATTGGGTGGTACGA  
AACCRACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT  
CCCGGTTTCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTTCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCAGTTCTGCTCCTCGTACTCGTAA  
TATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC  
CGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTT  
TTGAGTCCGCCCACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACG  
GACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGA  
GGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGANAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTAAGTGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCACTCGGGCCCGTATTACCAACGACGCAGACCAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTTCGTTCCGCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTGGGTT  
GTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACA

GGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
NGGCCATTTCCCACTGGCACAGNCAGCGCTGGGGNTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAAC  
GCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAA  
ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCG  
ATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGG  
ACCAAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACG  
CCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGA  
NGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGC  
CGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGA  
CTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCG  
ACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACCGGAGAGGGT  
GGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
AGTACCCGTAGACCAACCGAGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCG  
TGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAAC  
CGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAA  
GTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGC  
CAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAG  
AAACCAGACCCCAAGTACTGTTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTT  
GTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTT  
ACACCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACCTGCAGACG  
GATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGC  
TATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTTACAAGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATT  
ATGAGGGATCCNCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGC  
ATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT

CGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCGTATGAGAGCCCA  
CGGGGGAATCCTCGCCTGCGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
TGATTTTCTTGCTTAGGCACCTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTCNCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA  
GCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACA  
AAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATG  
GCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCC  
AGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGG  
TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCA  
TAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGC  
AAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGG  
GCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTGATAGCT  
ATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGA  
GTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCAC  
ACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTG  
GCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTGTCAACTGGGCATAGGA  
GCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTC  
AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
GTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAAT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCC  
TAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA

GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGG  
TCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGC  
AAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCCCTAACGGGTGAGCTGGATTATGGCTACACCCGGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGC  
AACAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACAGGTCGGTGTGTAGCAGGAGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAATGGGTTACGATCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTA  
ACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATA  
AGATACCCGCAAAGAGTGCATAAAG

>E4, London\_17, VIM-2, 04.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCNGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA

GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTTCGACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTANTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCANCTTTTAGTTTACGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCNCCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA

AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGGTTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCCCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGTCTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGGT  
CTAAACTATGNTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACCTTAACTCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAACTATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTACATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGTTTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGCGGGGGACTTATACGCGCC  
CCGCTTGGGCCCGTCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCNCCCCNAGTCTCGCTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATNACNNNAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGAC  
CTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACG  
GGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTGCATCAGGCTCGCCGGCTCTGCCAGCACACGTTG  
GCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCG  
ACCCCGGCTTCTAGACGATNGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGT  
CAGCCGGAGCGTGTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGG



ACAACACTCAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAAT  
TTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAG  
GCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTNGTAGATAAACGAGTCAAGT  
CCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCG  
TGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTAGCCG  
ATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCA  
GGGTATTTGGACCATCAAGTGCCTGCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGG  
CGCTCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGG  
TAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTT  
TCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGA  
GCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTG  
CCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGT  
GCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTTCCGCTC  
TGCTCCTCCTAGTCTGCGTCTGTNGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATAT  
CCCTGCCTTAGCACAATTCGTAGCATCATNACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTCA  
GGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGAC  
GTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGA  
GGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTATAGGATTGACCGCTATTAAGCTTCC  
TTCATAACACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCGCTGATTGTAGCTCGGGAACAGGTCAA  
GCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGTCTTCGCCGAGCTAAAGAAACCGGG  
AGCGGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTANTCGACTCCTAGAAT  
AACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTC  
CCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTACCTCA  
CCCCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCT  
AAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCA  
CATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCG  
CCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAA  
GGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGA  
TAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTT  
TACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGCTCCTGAGCGCGCTGTCTACATCCATG  
GCGTCCCTATACCTTAGTCGGATCCTGTTCTGTTGCCCTATACAGAAAGCTGGGGGACACAGGGATTGCACGG  
CAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCAAAGAGCGATAGA  
ACTGAGCGCAATTACAATACGTCTCTCACGTGACTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTC  
GGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTTTG  
CGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGAC  
GGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGA  
GCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTT  
AATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAG  
TTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGCGGCCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCANGTGTCCATTTGGCATTGGGTGGTACGA  
AACCGCACTCGGCAAGCNCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT

CCCGTTTCGAATATGTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCT  
GAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA CTCTGTA  
TATGAACAGCCGGCGTGCGCCGTAAAGNNACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC  
CGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTT  
TTGAGTCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTTCGGCAACCGACG  
GACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAGTTGGCGATCTCATCTGTCTGGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAAAGGGGGTTCCACCGCGACAACGA  
GGCGACTGTGTGCGAGTAGATCAGGCANATGTTGTAGTGTAGGTCCCACGCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGT  
GTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCCGGGCAATACA  
GGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAAT  
AAAACGAGACCCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACG  
TGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGCTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCA ACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTNGCCGTATAC  
ACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCA ACTAAATATTTAAC  
GCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAA  
ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGA ACTTCGGTAGCGCAGTAGACCTTCCGNTGGCGCCATCTGTCCGACCAGAAGGCGCTTC  
GATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTAAGTCAGCG  
GACCAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAAC  
GCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTG

ATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGG  
CCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAG  
ACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGC  
GACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGG  
GTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGTTGATGTC  
AAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATNAACACAGTGCCGCCAGGGGTCCGTAGGT  
GCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTTCTCCGGACACGA  
AACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTAG  
CAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTTCACGGTGGT  
GGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAA  
AAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCC  
GTTTCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGG  
TCTTACACCCTGCCCCAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAG  
ACNGATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTT  
AGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGG  
ATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGG  
ACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGA  
TTGCCGCTGCTAGGCGGAAGTGCAGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATAC  
CCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTAT  
TTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGA  
AAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATG  
AAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTA  
TTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGG  
CACCAGAAATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAAAC  
TTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGC  
TCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCC  
ACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAG  
TTGCTTGTAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGC  
AGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGT  
GGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTAT  
GAGGGTGGGACGGCAAGGGTTAGGGTTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGCCT  
GCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTA  
ATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCC  
AGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGT  
CAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCAT  
GCGAGGGGGAGGCNATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCAGAAGTTTGGGAGGAGCTCTTGG  
CATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAG  
GCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGG

GGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCA  
CCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCG  
CAGGGGGGAAAAGTTTCCAGANTCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGAC  
TGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGTTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTTGAAGTCCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCGAGTGGTCTGATGTTGTGACGGGGAGGCGACGTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAAGTGGAGATACAAGGATCGTATGGACCT  
CAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGC CGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATNGTACCTGGTTAAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAANAACCCAGGCAAAGAGAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCG  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATNACCAATCTAGCTGGANTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTT  
CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTACAGCTATTTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCTCAAATCCGCACGCAGGTTACCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA

GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
NGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGTAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTCCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P18, London\_17, VIM, 04.10

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTCCCAAATNGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCNTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACNCATTGTCGTGACTAGCTCTCCCTACTTGTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTNCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCTGTCACGCNCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
NTAGCNCAATCCTCTAACGCTCGAGNTAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGNAGGAATG  
TGCGCCTNCTAGAAGTCAGCATCCGAGCTCCACTGNAGTCCGATCCTNTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGGATCTTGTCTACGGACTCCACCTCACTAGTTTCTGTTATATGGTTCGGGTTT  
TGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGAC  
ACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCAT  
TGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCNNTGCCNAAGCGTTTAGCCAAACAAAT  
GTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGGCGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTCCGCTTG

TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
TGTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCNCGCTGCTGTCCTGGAT  
CTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGC  
CCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACC  
AGCCGATCTGGATCTCNNTTANATTAACNGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACAG  
GANTATTTGTGGACATTGCGGCTCTGCGTNTCGCTCACCTTGTGCTATGCCATNNTCTCATGCCCTGCGG  
TTGCTCGTCACCATATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCG  
ACCAGCCGCTTNTCCTCCTGCTCAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCT  
ATCCTCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGC  
CACGANAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTGTGCCGGACTGGTGCAGCTTTGCCT  
TTGCCGGAACCCATGCTGCAAGCCGCCAGGCGTTCCCGTGAGGCGGGTCGGTGCAGATTCCCGTCCGTGAC  
TCACGAACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
AGTGTTATCACGCTCGCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCTG  
CATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGG  
TGACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCANCTGGNGGGGGCGGGCGCATCACGGGTGCG  
AGGAGTGGCCTTGTACTAGGGCGCCACACTCCGACTCTGGGACGNCTCATCAATGCGGACTGACTCCACG  
CTCCTCCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTACTTACGGA  
GGTACCCGTGCTGAGCGCTAGGCACGGTCTGCGCNCNCTGCAAAATATGCCTTTCAGTAGCCCCCAG  
CTCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACACCAGGCCGAGCGCGTCCAAAGA  
GTTAGCNTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGNNGATTGCTAAGATATCC  
ATTACGCGCTGTCGTGCACTACAGGATACGGTCTTTCCAGGTGTGTGGGTACANTATTGAGTGAATGCTGA  
CCACCGACCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTT  
TTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATCTTCCATACCGCCAAATCGTCATTTAGCTTTGCT  
AACTTATAAAGGTGCGTNNTCGGGAGGATTAGATACAGTTTCTTTCAGCCCTATCCTTTCCGCATACCAA  
CAGATTAGTACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCA  
TCCTGTTTTCGGTTTCTTGTAAACAACAGATACGCTATTNGTCGGCAACGCCATCCTATAACGCACGTANTCG  
GGATGGGTCTTGCCTTCGTCCCGATAGCNTAAATTTCTGAGGCCCNNGGCACTGCCTACAGATTACTAATG  
ATGGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTNTTCAGGTTCTTCGTGCCNG  
GTTTGGTTTGGGNCTCCTCCATATCATTTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACT  
ATCGCTTTTACGAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTNGCTGCTCTCGTTTT  
CGGGGCTGTCCCTAATAGATGTACTGCATCAGAGTGCTTNTGNTGGTGTCCAATCTCATGCACTATGTGCTC  
AGATGTTAGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGTCTTTAACCTGCGTATCCTCCAAGGCG  
TTTTCGGTGGGGCGCTGCGTTAGANCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCNATTCTA  
GGCGCGCNATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTNCAACAGCATGAACTTGTTTTAGATGC  
GGGTGCGACAATAACGAAGCCTTGAGCTAACTGGCNATAAGATTAACGATCTTCCATCACGATTGGTCACT  
CGCATCGTTCCGTCTAAACACTATGCTGGTTTTTACTNCTAATGATCGGTCCCGTCCGGTATACATTTCTCCG  
CCTTGGCGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTNCTCGTGCCCTNCTCGCGACAACACAC  
ACTCCGGCGCTCATTGCGGCGTGCCCTATGGNTTCCGACGCCGCTACTNAANAGTAGGTCAATGTCTGATTT  
GTACCCAACGCCCTAGCCTGCCCTTGTAGCCGTCACTTTAATCCNNAGGGCTNAGCAGCTGTGCGCCAGAGT  
TTGTAAGTGGTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAATCCGCGATTACTATT  
GAGTGTATCCTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATAACC  
GCACTGACATCAGTGCTTCCCCTGTACGCCGAGNTTCTGCACAAAGCTTNGATCGCCGTCGGNNTTGTCC  
TACGGTAACGCGGCAATACGANCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGA

TACCNTATTATTATGCCTNGGNGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTNNTTGTAAGCTCAATG  
AAAGGCATTCTGTGNTTCTNACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCC  
TGCATAGCTAGTATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTTCACTNNNCCCACTGACGTT  
TTACGACGGTTGTGTACTIONGCTGATGCCTATCGTTTTTTCTTCATAAGTAAACATAGGATTGTCAATGGAGGG  
GGTGNNAGCGNTCGGCCGACNAGGGCCACCCTCGCGACCNGCTTTGTGCTGCGGCCTCCCCCAATATC  
TTCTTCCATTGACCCTTGATTAACCCCTCAGTGGTAGTGGNCCGCATTCCCGGCCCTCACTCATGTACGCGC  
TCTCTTGCTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTAC  
AGATCCGTTATGTGCAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGAC  
GCTTCACCCCCCGCGTCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGCTGGGGTCCCTCCCT  
TACTATGAGTAAATGTACCATTAATCAGTNACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTG  
TGCCCTTCTTTCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTNNNCGGGGACAGAGAAT  
GTCGGTTTTCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGG  
GTCAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACA  
AAATTACCATTGCCCTTATTNTGACGGGGAGATCCANATATGCGGGTACCTTTACGCCGCTTTCTGTTGTCGCC  
CAGACTAGGTTAGGAACCTATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAA  
TGCGGAGCACATTAACCGCTNGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGNTCGACACCGGCCG  
GGGGACTTTANACNCGCCCCGCTGGGCCGTCCCGGAGAGCNGATAGCTCCTCATAACCCTGCAGCCACG  
CGGCGTCACTACGCCTCCCCTTTCAGACCCTCNCGTNNATGCTGGGGANTCTCCTTGACCCCCGAGGGGTNC  
NGNNGNNTTACCCANNNTAAGGCCANNNGCTGTGCGCTTAAATCCGGGTNNNTGTCCNCCNNGANN  
NCTCGCNCGGGGATTCCCCGCACCGCCNNGTGNNGGATNNACNGAAACGTAGGCNTGTCTGCGCGCCTTN  
GCCACCTGGACTTGANNNACGANCTNGATNGGTCAAGCGAGGGGNACCCCTGCACATTTTCTGACCCA  
CACAGGGGAAGTCTCCTCCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCT  
CGCCGGCTCTGCCAGCACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCAGTCTCGA  
ATCTCCCGGTCATCATGTCTCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCT  
CCATCACNGCCACCATCGAGTGTACGCCGAGCGTGTTCCTGTATNANNATGCTCCCCGCTCTCGCGGTG  
GCACGCGGAACCAATTTGTCCGACAACACTCAAAAGTCGTGTCGGGGTACGACNCCCCTCAGTAAGACTC  
TCGCGCTTGTAGANGGGTAACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGT  
TTNTGATGACTCGTTTACTGTANGCCTCCTTCTACCTGCGNTCCGACTCTNGGAGGAGTCTCCTATGCTACA  
TCGTTGGTAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCC  
TGGGCCATCCAGCTGGGATTAGTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCT  
GACCTCCATCCAGATCATTACGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGG  
TGATACAGTCCGCGAGTCTACTCCAGGGTATTTGGACCATCAAGTCCCGTCACAAAGAAATACCATAAACACC  
CCCCAAGCGCCTGTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCTGTTAGCGGGCACTACTAATG  
GTACCAGTCCCCGCATCTAGCTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAG  
AGTNCTAAAGCTTTCTAATTCTTTTTGCTGGAAGACCATACGAGCTCCATCGGCGGTNGCNGGCATGCCCC  
CAGCGGCGTGTATTTGACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATT  
GGGCGGCGCTAGTGGCTTACTNNTGCCGTTGGTACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAG  
CCGCCCCGCTGATGGTCCATCCGCGTGCTCATGCCTNNNTATTAGTCGAGTCAGGCTCTACTGGCAGCGATTT  
CTTTTACTACAACAATCCGTTCCGCNCTGCTCCTCCTAGTCTGCNTCNNGGATCCTTATGNACAGTATAAACG  
GCTGACTCAAGGTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGNCTTCTACCCCTNTTAA  
CTGTTCCGAACATCCAATGATGCTTTCAGGTCACTACGCNCTCCGCGAGCAGTCAAGCGACCTAATNTACTGC  
CTATCGCTCGATGACACTCGCAGTGGACGTGCCCTGCNCACGCCAGCGTACAAATCAACCGGCGCTTATTCC  
GTGCTACCTTACTACAACATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGNGTGCG  
TGATATCTGTTAGCAATACATGGGGAGAATCTTTGGTACNTTACGTATTCTGCTGTTAGANATTTTACAGCGG  
TTCATAGGATTGACCGCTATTAAGCTNCCTTCATACCACCTCCTACCCTCATATTGATCTNCCCAGATGATTTT

CCGCTGATNGTAGCTCGTGAACAGGTCAAGCTGTNGGNAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCT  
GGTGCTCTTCGCCGAGCTAAAGAAACCGGGAGCGGCAAAATATTGCTTNGTATGTGACTGCGGGTGATGTCG  
CCCATGGGGCGGCTAGTCGACTCCTAGAATAACACGGCCGACGTTTTGNTGAACCGTTAAGGCGGGTCTGT  
GGAGGANGACCTCCCATTACAANAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGNAGCATGCGGGCTGGA  
CCGGCCTACCANGCGTTGGCACGTACCTCACCCCGTCCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCG  
GTACCGGCNNGGACACTCTGCCGAGTTGCTAAACTGCNCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTNT  
ACCAGGGGGTTATTTACCATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGG  
GCCTCCCATGATTACGTGTACGTGCCCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTA  
TATCCAGCCTAGACCCGAACACCTACAANGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTGTCCCTCAGT  
CACCTTCTAGTCACTGANTACGATATTNGGATAGTTCATAGGCATGTATNNNCNACGCACCCGAGTTAGCAA  
CTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGATTTGGGGCNCNCCNGTTCTGCGCGCNTATAGGCCAGGA  
AGTTTGACGATACGATAATCTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTAT  
GGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTTCGNGGCCTAT  
ACAGAAAGCTGGGGGCANCAGGGATTGCACGGCAGCGCNAGGTGATGTCCNNGGCATGGAGATTATCCCT  
NTCNGTGGGACATGGGANCGAAGAGCGATAGAAGTGGAGNGCGAATTACAATACGTCTCTCACGTGTACTAAC  
CTATNAGTCAGNCTTTGTCACTGGTGAACGCTTCGGGTGCCGNNAGGAGTGTAGCGAGATCGCATCAGGCCT  
GTNCCTACGTTGCGCTGGCCGCGGGCGTTTTGCGCAATTCTACGGGACGCACCCGGCTTGTGACCGTTTGA  
CCCCATGATGGGAAAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTTCGCAAGTGGAA  
AAGTCCCCCGTGAGCACTTCTCTCCTGAGTAGNGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTA  
GACGCGCCATACGTTCCCGATATTGAGCGCTTAACTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCA  
CCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCCCTATTCTTATCCAATTTGCGTT  
TCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTACAGATGGCCGGCCACTGCAACTAATGTCTAATCCTG  
ACGGTTGGGCTTCNAGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCNNGGGAGGGACGCGT  
GTNCACGTGCTCCATTTGGCATTGGGTGGTACNNAACCGCNCTCGGCAAGCGCAGCTCTCTTGTTCGGCTG  
GGAAGTTGCAANAGACAGTTCCAGCACATGACATTCNCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGG  
GGGACAGCCGAGAAAGACCAGGTGCGAGTAGTCCCGGTNCGAATATGTTAACTTTGGAGCATGCTTTATTN  
GNACTCGGGTTGGGGATCTTCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTNCAGCGCTAGTGTATA  
ATCNCCTCCACGTTCTGCCTCGCTCCGNACTCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAA  
ATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGNCGTCTGTCTACTATCCT  
GTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAA  
NTCGGAAGAATCACCGTATGGGGTCAAGACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAA  
TTCCCGGACGCGGGTATCAACAGCCGACGGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATNCGAA  
TTTGTCTCTGTTCTAAAAGGGTCCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCG  
GACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTACAGTTGNCGATCTCATCTGTGCGAGGGGTTGA  
GGATTACTGAGCGCNAGCCAGCGGNCCGNCGACGGATCGGTGTCAGANNAGCGTTTATCGTGTGGAAAN  
GANTAGGGTCTAAGGGGGTTCCACCGCGACAACGAGNCGACTGTGTGCGAGTAGATNAGGCAGATGTNG  
NAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGA  
CGTATAAGCAGAAAGGGCGACGGGNACAGCAGNTCGAACTCANACTCGGACGCAAGCACAAGGTGTAGGG  
ATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCAGACCAACGCCCGACAGTAATTTCCATAGGC  
AAACCTCCTCTTGAATCTGTANCGTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAA  
GACAGCGACAGNNANGAGCTGGATGATCAGTAGCTACCGGGTACGCCTCTCAGACNATGGGGGGTAGGG  
GGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGC  
TAGAGGATCTACGGCGTCTGCTNTANACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTG  
AACGGCGGCTAAGTAGNNGGCTAGGCCTTCGTACGGTGTATGTGTACTGGNCCGCTTNNCTGNNGACTNG  
NNNTGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTGCTATTTGTNAGCCGCATAGGAGGGGTCC



GCAGTCGGGCCCATTACCAACGACGCAGACCAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAG  
AAGATCGTCGTAACCCNNGTCAGCGCCANACCCCAAAGAGTTCAATGACCCNTGTNGACAANTGGCGAAGA  
CTCTGAAAACGGCGTCNTGTACGATTCACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAAC  
TTCCTGGAACAGAAAGCAGCGTGCCTCGCCCTGACTATCGACCCGCGTGCTACCAANCAAGCATCCCC  
NCAAATCATGTCCAGTATACCCCTCTTTGNNCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTA  
ATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCCTT  
TTTGACACTGAATCGCGACCTACTTGCCGATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGA  
AATGGACTTATACTCGACCAGCTGCGAGTACTACCGCTACGTGGCCCATTTCCACTGGCACAGGCAGCGCC  
TGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCC  
GGCNGTTGGCTACTANAGGACCATGCAAGGCGATCGGAGNCNNCTTACAGACGGCTCTTCGAGACTATCCCAA  
AGCCTCTCTGGGATAGCAGGAGCTTAACTGTCCGATTCAAAGAACCCTGCTNCGGGGACTAGAGAGAAA  
TATATGCCTACGTTACATGCNTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCGGACGGAACACT  
TCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAANNACGA  
ACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCGCACATGGCCGACTTCACCATT  
ATGTCACAAGGNGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGN  
GCATCCGAAACACCGTCTTAAGAATCGCAANTNGAGGGNNCTGACAGCCATCCACTGCCGTGGCAAGTGTA  
CATCATACCTACCAAGCGTCCCAAGTAGCCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAACTG  
GGGCTTCGGACATTGATGTGGCNGTTACANCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCC  
GGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCNANGAACCGCTTACAAAATGGACCT  
GCAGACGATTGAGCTTGAGCGTACCCCAAGNNAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAG  
TGGAACCCGGGACAATCAATTGACAAGGGGANAAAGCGAGCGTCTCCGCCGATCAATTGCCCTTCGCGAGTGC  
CGACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGAGACCCCGTGAACCTTCGGTAGCGCA  
GTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGNGCTTCGATGTGCAGANGAGATCATCCCTGTATT  
AGTGAAGTNATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACCAAAGATAGGGANCAAAGTAGGT  
TTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGG  
GGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTGCCCTGTGAAGGGAGATGAGGAAG  
GAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGA  
GGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGAC  
GCGGCATGTAGGTACCAATCGGCCCTATCCTNCCGATGAGGAGTGCACGAGAGGGACTTCTGCTCCGGTC  
CAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAA  
CAAGGAAGGGAGCGGCTCGAGCNGTCCANGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGNGGTC  
GGTGCTGGACATANATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGA  
GGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCA  
AAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAANTATGACCGATAGGNGTNCACCT  
TAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACC  
CGACTATACTAAGAACCCTGACTGACCAAGAAGGCGACGCAAAAGAAACCAGACCCCAAGTACTGGT  
GCCGNTTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTGTTACAGCAGGGGGGACCATCT  
TCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACNCTGCNCGAACCCATCCG  
GGGAGGCCGCTGCAAGCNGTNGTTAGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATG  
CCGTCCGCCAACAAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGNTAGCTATCCATGATATTGGTNGTTGTA  
GTGTCTGGAAGGGGTGACGAGAATATGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGGA  
ATCGAAAGAAGGGNGTGGGGAGTATAGTAAGAAACNTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCT  
AGGAAGCGANCAAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGGG  
CGGAAGGTGTCTTAACGTTGCAAGGACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTA  
CGGTTAGTGAAATCAATACCCCTAAGACCNATTTTAAAAGCCATTATTTGGTANTCGCGACAGAGGAACTGT

CTGGNCCGACAGTGTGGCGAAAGGCANNACAGGAAAAGCTGGCGAAAAGGCGGTGACANATTTGCGGCC  
CGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGANATNAAGGCGCAGAATAGTGTTACANGC  
CAGAAANCGAGTTACACCGGGAGGGAATGGAGCCCAGAACANGGCTATTATGAGGGATCCNCTCTCATTG  
GGACCCNCTCATGTAANTAGTGTGTGTGGCGAGACGGCNTNCTTCGGCATCAGAATTATTTGTTGTCGGA  
CGTTAATCAGNCNNGTGANNGCACGCGCTATCTNNGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACG  
GGGCCGACGTGAATGCNGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTA  
GGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCACGGGGGANTCCTCGCCTGCG  
TGTTGTGNGCGGGTGGTTCCATCCNGAACCGCCACGTAGCAGAGCAAGAAGTTGCTTGTAACTGACTTGCACC  
GATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGNAATAGAAGGGCGAGA  
GAAAGCGCAGACGGTNCGTCTGGNGCGGACAGAAGTAGTTAGCTAAGCTGTGGNGCATGAATGCTGCCTTA  
GCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGG  
TTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCAANCATTATGAGATGGAC  
AGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCNTNACCCGGTGAGGACTTAAATAGGCGGAGGTCCTGCCAC  
TCACTTAACGCAGGATACGATNNGAGGGCGGAAATCTCCCGTTATAAAATCCAGNCTGAAAGAGTGATCAGA  
GCGCGAACAAACGACTCAGGATCCGGCAACCGTAATCCCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCT  
ACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGAGGGGGAGGCAATCGTCT  
CCTCCATGCCCTTTATAGGAGAAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTGATTTCTTTGCNTAGGCA  
CTTCGTAGTGGTACTGATCGAAACNAACGAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGA  
AGCGCTTCGCGNNGCAAATTCGGCGAAAGGCGGTGATAGTATATGGGGCGGGNNGAGGGAAAATGTA  
GCANGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGCTCATTGGGACAAATAT  
GAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCATTGTGCG  
TACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAATGGCTGNNCATGTATAATTN  
GAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCAGCCACGTTTGGTNCT  
GAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTCAGCTATCTTATGCC  
ATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCNNGTGGCATTAAAAATA  
TCTCGACCGGGTGGGCGGAGANAGAGNGAGAAATGGAATACATTCCGCGGGGGGTAGAGNAGCGAGNNA  
AGGTGTCATAGTTTAGGCAGACGCANGGACCACGGGGCATGGAAGNTTGTACCATAAGCAGGGNNNTTG  
TGGTGTAGGTAGCGAGGGCCCAAAGGAGGGNCCCGGAGTTATCATCTACCCCGCAGNNGGGGAAAGTTTCC  
AGAATCAAGGTATGAGGATAAACACACCAGAGCNCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGC  
GAACAGACCCGTGACCGTGNCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTACGCTATCAGGAACTATG  
TCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCA  
ACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAATTA  
GAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATA  
CCCTAGTGANCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCNTAGCTATTTAGAATCCCTAG  
CCACAGATCTCGTCTTGGCGACTCATCTGGCACCTTAGCCCCANTGGCGGTGTGGCGAGTCCAGTAGTCTCC  
ACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGA  
GTGCTTTTGAAGGTNAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGCGACGCCCGGA  
GGAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTG  
GAAGCTAGGGAANGGAAGANTTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGANACGTTGACGCC  
CCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATNAGTAGGCAGCCCTCCCATTTGTGAGAACG  
CTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCNTAGGAGCATATGCCCAAG  
TTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCCTCAAGCCNNGTCAA  
TCGAAGGAATTAAGATNCTATCACACAGTGCCTGCTTAACCNGTGACGGAAGTTAAAGTCTCTGCACTGGAT  
GGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGANATAAAGTAGGGCCGCTAGCCCTTACT  
CATGGCCCAACAGTTCNCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTCTCGGGCGGT

TACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGCCGC  
ATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGC  
AACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGCT  
CGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCCAAAGAGAAAACAACGTAACGATCTGTTGNAGCT  
CTTGCTATACTGNCAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATAC  
CTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGGNCGAACAGCT  
GANAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAA  
TGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCC  
CCTTCGTGGTAAACTGTACCCAGGATCCTNCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAA  
TCAACGCGCTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTCGCAAGAAAGACTAA  
AGNTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACNGGGTCTAGCGGGTG  
ATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGCTCAATAGCGG  
GCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGG  
ATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGG  
GAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGAC  
AGACCCTCAGACAACGTCTAACCACGACCCCACTGGAGTGGTACCCAGATACTGAATTGCCAGNTCGAACATC  
GAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCT  
GTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGTACTAGTTGGTCTAAGCACACCGTCTGGGG  
TGCGCCAGAACCGTAGTAGAGTGNACAGANAGTAGCTGCACATCTCCCTCCGNATCGAGAAGGGCGGTT  
GGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACCACGCAAGGAACCCCTCTCTCGAA  
TTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAG  
GCAATCCAGCGATCGATATGCAGGGTGGGACGGAACGAAAATCTACTCCGACGGGGGATCCCCTCAA  
ATCCGCACGCAGGTTACCCCCGCGCGCCCACTCTTGTTATTACGATCTTTCTGCCTGGATGCGAGACCGATA  
GTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTTAATCCAAGAGGAGTGAGAGCAGGC  
CGACGTTTATGTTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCC  
GCAGGGCCGGTACGGGAAAGAGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCANGTCGTCGATTGCG  
GACTCGTTTTNGGAGGATGATGANAGGGCAGAGCCCTAATGAGNCGGTGTCGAAAATACTCTCATGTAAAGA  
AGAGGTCCTTGACACGNNTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCC  
TGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAACCAGGTCAA  
AAGACGTCTACGGGCGCCATGGGTAAGCGGTAATNCGTCAGCATCAAAGCCTTACGTNGGTGCCCGGTGCC  
GCCANGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGAC  
CAAGTAGATTGTAGCGAAAACNCGGAANACGTGTTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTAT  
ACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATA  
CGTAGAGCTGAGNNGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCNAATACGANCTTACA  
CGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTG  
ATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTNGNCTGCTCTGGACTAAGGGCAAAGGGAATGG  
ACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTA  
TACGGNCGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGT  
GCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGAGCGGGCAGT  
GCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGNGGTGCGAGG  
AAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACG  
AGCGGATTCAGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCATCGAGGTGA  
CANACGGTGAATGGGTTACGTTCCACACCGNNGGCAGTTCATCGGCTACCTAGCTCGTAACGTCGGATGT  
ACACAATAGCGAATGGTGGGTCGGTCCTTCAGGNGANGCATCGTGCTACCAGCCGCCGATAAGATACCCGCA  
AAGAGTGCATAAAG

>P22, London\_17, VIM-2, 06.10

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGATGGGCGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTGTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCGGTTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAGGTACCC

GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTGTTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGGTGCACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCCC  
CCCTCTCGTNGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGGCTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCCCGCCGCATCTTATCGATACGCGCACTGACATCAG  
TGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTTCCCGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC

CGCCACGTGTGGGATCCACCGAAACGNAGGCGTGTCTGCGCGCCTTGGCCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCTCCTCCGTACGG  
GAGAAGAACTATTTTCATGTTTTGCGCGTACCCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCCTCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACACTCAAAAGTCGTGTGCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTT  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGTA CTCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGC  
TGTNGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTCTTCGCCGAGCTAAAGAAACCGGGA  
GCGGCAAATATTGCTTTGTATGTGACTGCGGGTGATGTGCCCCATGGGGCGGCTAGTCGACTCCTAGAATAA  
CACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGGTCCC  
GGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCACC  
CCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCGAGTTGCTAA  
ACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACA  
TTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCCCTCGCC  
CATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAG  
GAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCANTGAGTACGATATTTGGAT  
AGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTT  
TACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATG  
GCGTCCCTATACCTTAGTCGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGCACGG  
CAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGA  
ACTGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTA CTGTTGTAACGCTTC  
GGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGGTTTTTG  
CGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGAC  
GGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCCTGAGTAGA  
GCCCATCAGTCCGATCACGTGCNGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTT

AATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAG  
TTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAA  
NGTCAGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGT  
GAGCCGTGTGTAGAGGGGAAGCCCCGGGAGGGACGCGNGTCCACGTGCTCCATTTGGCATTGGGTGGTACG  
AAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGAC  
ATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGG  
TCCCCGTTTCAATATGTTAACTTTGGAGCATGCTTTATTTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAICTGTAA  
TATGAACAGCCGGCGTGCGCGTAAAGCTACACAAAATCTATAGGGTATTGCGCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC  
CGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTT  
TTGAGTCCGCCC GCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACG  
GACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGA  
GGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTAAGTGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCACTCGGGCCCATTACCAACGACGCAGACCAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTT  
GTGCGCTTGGTCGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACA  
GGGGACAAACACACGGACTCCACGCCGCTTTTGGACTGAATCGCGACCTACTTGGCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAGCTGCGAGTACTACCGCTACG  
TGCCCCATTTCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTANATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTTACAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAAC  
GCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAA

ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCG  
ATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGG  
ACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACG  
CCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGA  
TGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGC  
CGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGA  
CTAATCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCG  
ACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACCGGAGAGGGT  
GGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
AGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCG  
TGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAAC  
CGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAA  
GTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGC  
CAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCGACGCAAAAG  
AAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTT  
GTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTT  
ACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACG  
GATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGC  
TATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAAATGGAGCCCAGAACATGGCTATT  
ATGAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGC  
ATCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGATGAGAGCCCA  
CGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGTAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGTGCAGCCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCGGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATT  
TGATTTTCTTGTAGGCACTTCGTAGTGGGTAAGTATGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTNGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA



GCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACA  
AAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGA CTCTTCAGGTTCCAATG  
GCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATT CAGAAGTTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCC  
AGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGG  
TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCA  
TAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCTTCGC  
AAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGG  
GCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCT  
ATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGA  
GTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCAC  
ACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTG  
GCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGA  
GCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATNCAAGGATCGTATGGACCCTC  
AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
ATCTAGCCCTTACTCATGGCCCAACAGTTCTCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAAT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCC  
TAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGTCCGAGGCGG  
TCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGC  
AAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACGAGATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCCTC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACCACGCAAGG

AACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGNCACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGAAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGNCGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P51\_2, London\_11, VIM-2, 02.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA

CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCTGCTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGGTATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTCTGTCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTGGGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGTGTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGGCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCAACCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTTGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGGCCCCAGGCACTGCCTACAGATTAATAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCTAATAGATGTAATGTCATCAGAGTGTCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGT  
GGGCGTGCCTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCG

CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTGAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACITTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAAACATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTTGTAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGTGACCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTCCCCCAATATCTTCTCCATTGA  
CCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGGCACGGATCTTAGCTGTGCCCTTCTCT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTCT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGTCGCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATA  
GCGCCCCGCTGGGCCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGTCCTACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCTCCTCCG  
TACGGGAGAAGAATAATTTTATGTTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCT  
CTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTGTTCTGACCTCCATCCAGATCATTC  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGTTCATATCGTCTTACGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCTTA  
CTNTTCCGTTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCTAGTCTGNGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG

AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTA ACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTT CATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAAATTGGATGGAGGTTCCGGCCTGGTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGAAACCTTGTTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGTTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTATTACCATTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCAACGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTACCCTTCTAGTACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCNGCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCCTATACAGAAAGCTGGGGGACCAAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCNNGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGATTTTTAGTTGCGCAAGTGGAAAGTGTCCCGTGAGCACTTCTCTCCTGAGT  
AGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGCTAGACGCGCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAACGCATCCAGGGTTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGTGGCTAGTAAAGTGGCCTG  
CGAACGTGAGATGGGCCCGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTCTCTACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTA  
GTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCCGCCGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTA  
CTCAACTCAGCCGAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGCTCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGACATAGCCATTCAATGGGCTCTCTGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAGGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGG

ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTCTATACTACCCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCANACCCCA  
AAGAGTTC AATGACCCATGTAGACAAGTGCCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGGTTCCGCC  
TACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTCGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCA  
GCGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTANCACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACCGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTCTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAA

GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTGTTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGNATTACCCGGTGAGGACTT  
TAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGG  
GCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAG  
ACAAAGACACCCCATTTGTCGCTACAGAGGTGCCTCATTGTATGGTGCATACGCAGTACTCTTCAGATTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTGAGAAAGTTGGGAGGAGCTCTTGGC  
ATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGG  
CCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAAAAATGGAATACATTCCGCGGGG  
GGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCAC  
CATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGC  
AGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACT  
GCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTATAACCCCTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGGCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GACGACGCCCCGAGGAAAATATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGGTCGTAGTTGNGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC

CCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCT  
CAAGCCAGTCTAATCGAAGGAATTAAGNTTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTTTGCTATACTGACAAATGACTCACCTTGAAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGTCCGAGGC  
GGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTT  
GCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACNCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACCGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGACGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAGGCGAGGAAACAAGTGAGTGCCCGAACCATGCGATCCTTG



GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACAGCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P21, London\_17, VIM-2, 06.10

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCGTCTATTCCGGCGTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGTGTCTGTCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGGGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGGTGTGAGTGT

TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCGGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGGC  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCATGGTCTGTAAAATATCGGGACCAACCGCCGCATCTTATCGATACCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTCTGTCTGGGGTTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCCAGACTAGGTTAGGAACC

TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCACGACCT  
NGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAAGTCGTGTCGGGGTACGACGCCCCCTAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATACGAGCTCCATCGGCGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCCGCTGATGGTCCATCCGCGTGT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGACAATTCTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTTAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTCAAGCTG  
TNGGTTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGTCTTCCGCGAGCTAAAGAAACCGGGAGC  
GGCAAATATTGCTTTGTATGTGACTGCGGGTATGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAACA  
CGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCGG  
AAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCCTACCAAGCGTTGGCACGTCACTCACCCC  
GGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAAC  
TGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATCACATT  
CCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTNCGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATACGATAATCTTTTCAAGGCTTTTTA  
CTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC

TGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCAGCACATGACATCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTAC  
AGTTGGCGATCTCATCTGTCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGNGGTCCGAGTCGGGCCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCATTGCGCCTGACTATCGA  
CCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTACATAAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG

AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACATCATACTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAG  
GTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTAA  
GTTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAACGCCAC  
GAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAAC  
CAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGC  
CGATCAATTGCCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGAG  
ACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGT  
GCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACCA  
AAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCTC  
TCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGATGCC  
CTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGTTCAGGCTCGGGCCGTA  
GGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAA  
TTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCACGG  
AGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGGG  
ACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGT  
ACCCGTAGACCAACCGAGGTCCGGTGGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTGA  
CCTACAGCGAGAAGATCGGAGGAATTTCCGGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGC  
GAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTA  
TGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTTCAGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCGTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT

TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAGTACTACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAAGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT

CAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGGG  
ATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCCTGGATGC  
GAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGCGAGGAAACAAAGTGAAGTCCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P52\_1, London\_26, VIM, 02.13

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTNTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCCGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGANGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT

GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGNATCCGCTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCNCGTGCGGTACGGCGCATTCTTGACCTCAATATTAACCTGCT  
CGTATGGACATTTNTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGTCCAATCCG  
CTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGG  
GCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTCCGCTTGTC  
TACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATNGTTGAGTCCGACCCCATCATCTCAACT  
GTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATC  
TTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCC  
CCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCA  
GCCGATCTGGATCTCNATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTA  
ACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAG  
CTAGGATCTGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGG  
ACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTT  
GCTCGTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGAC  
CAGCCGCTTGTCTCCTGTCNCAACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCTCCTCCCGCTA  
TCCTCGATACGAATGTAGGTCGAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCC  
ACGAGAGGCCGGTTGATTCAAGCTCTCTACGGTAATTTTTTTGTGCCGACTGGTGCAGGTTTGCCTT  
TGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGTTCCCGTCCGTGACT  
CACGAACATTTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
GTGTTATCACGCCTCGCCATGGACTAACCTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCTGCC  
ATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGT  
GACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGGAG  
GAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTC  
CTCCTCGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTT  
AGCTTACCGAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGCGTACGATTGCTAAGATATCCATTA  
CGCGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCAC  
CGACCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGT  
CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACAGTTCCCTCTTGAGCCCTATCCTTTCCGCATACCAAACAGA  
TTAGTACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCT  
GTTTCGGTTCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGG  
TTTGGGTCTCCTTCATATCATTTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTCGTTACACTATTGGGTTGGCGCGCAGCTTACCCTGGCTGCTCTGTTTCCGGGGC  
TGTCCTAATAGATGTAATGCAATCAGAGTCTTCCGCTGCTGCTGCAAGGCCCACTGCATCCACTATCGCTT  
AGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGT



GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGAC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCAGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAA  
CGCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTG  
GTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGAT  
CCTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATAACCCGCACTGAC  
ATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGGGATTTGCTCCCTACGGTAAC  
GCGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGCTCCTTCCGTAGTCTCACGACGATACCATATT  
ATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
CTGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTA  
GTATCTGGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCACTGACGTTTTACGACGGT  
TGTGTAICTGTTGATGCCTATCGTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCGAGC  
GCTCGGCCGACCAGGGCCACCCCTCGCGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTG  
ACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTCA  
GCGATGCTATTCTACGTTGCTCCCGGTGAGCGGTGCCACGCGATCTACCAAGTTTTATACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTGCCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCAAATATGCGGGTACCTTTACGCCGCTTCTGTTGCTCCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTTCCGTA ACTCGTGGTGTGGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCCGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGNCTTGCCCCACCTGGACTTGAGTC  
ACGACCTCGATCGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCNCCTCC  
GTACGGNGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACA  
CGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCC  
TCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATNATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGNTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT

CTCTTTTCGCTGGAAGACCATACGAGCTCCATCGGCCGGTGGCTGGCATGCCCCAGCGGGCTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTGGTGTGATGAAGAACCCGTCGCCGTTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTT  
CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATNCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCNTTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACC  
NTGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGG  
GAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGCTATTAAG  
CTTCCTCATAACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAG  
GTCANGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGTCTTTCGCCGANCTAAAGAAA  
CCGGGAGCGGCAAAAATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCT  
AGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACNA  
CGGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCA  
CCTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTANNNNNNNNNNN  
NN  
NN  
ACACCTACAAAGAAGGAACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGA  
GTACGATATTTGGATAGTTCATAGGCATGTATANCCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCC  
CTTTTTGGGCTCTAGATTTGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAA  
TCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCG  
CTGTCTACATCCATGGCGGTCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGAC  
CAGNGATTGCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGAT  
CGAAGAGCGATAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTC  
ACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGC  
CGCCGGCGGTTTTTGCACAATTCTACGGGACGCACCGGCGTGTGACCGTTTACCCCATGATGGGGAAAGC  
ACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCCGAAGTGAAAGTGCCCCGTGAGCACT  
TCTCTCCTGAGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCC  
GATATTGAGCGCTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAACGCATCCAGGGTT  
CTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTA  
AAGTGGCCTGCGAACGTGAGTGGGCGGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGA  
GCCAATGCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGG  
CATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAG  
TTCCAGCACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACC  
AGGTGCGAGTAGGTCCCGTTTCGANTATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGATCTT  
TCCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCG  
CTCCGTA CTGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTTCGCCGAGC  
AAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACG  
ACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGG  
GTCAGAACGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACA  
GCCGACGGGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGCTGTTAAAGGG  
TCGGCAACCGACGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCT  
CTCGTTACGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAG

CGGCCCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCC  
ACCGCGACAACGAGGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGG  
CTCTCGGCGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGG  
GACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGT  
CGGATGAGGTTGCCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTANCGC  
TATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGAT  
GATCAGTAGCTACCGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTC  
TCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATAC  
ACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGGCGGCTAAGTAGGGGGCTAGG  
CCNTCGTACGGTGTATGTGTAAGTGGGCCGCTTATCTGNGCGACTAGGAATGCCAGAACCCCTAGTACGTGG  
GCGCAGCNTCCAGCGTTGCTATTTGTNAGCCGCATAGGAGGGGTCCGCAGTCGGGGCCGTATTACCAACGAC  
GCAGACCAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGANGATCGTCGTAACCCCTGTCAGCGCC  
ATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTC  
ACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTG  
CGTTCGCCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTT  
GTTCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGC  
GACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCC  
CGATGTCATATAATAAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGA  
GTACTACCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACG  
AAAGAGTCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCA  
AGGCGATCGGAGTCCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAA  
CTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTAC  
GAATGCAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGT  
CATCAATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCG  
AACGCAGGTATCGTTCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAG  
GTGTAGCGAGCGNGCGGAATCGGATCGAATGAAAAAGCTGNGCATCCGGAAACACCGTCTTAAGAATCGC  
AAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAG  
CCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACA  
GCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCC  
AACTAAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAG  
GGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGG  
AAAAAGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTG  
GACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCG  
ACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACCCGC  
CGCTTAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGC  
TGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTT  
AGGAATCGCGGGTGTATGCCCTGTGAAGAGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTAT  
AGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAG  
CGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTA  
CCGATGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAA  
AAACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGA  
ATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCA  
GGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTT  
TCCTCCGGACACGAAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGAC  
TGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT

GTGTTACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGA  
CGAATCCGATGCCGTTTCGTTACAGCAGGGGGCACCATCTCCCTAGCTTGCCTGGCCANAGGAGAGGCTAT  
GGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCA  
GTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGTGGAGCAAAACGGTAGG  
CGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACNTCGGATGGGAGGATACGGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTANAAACAGCCCTAAGG  
GCCAAGCTGCCGATTGCCGCTGCTAGGCCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGA  
GCGAGGGCCAATACCCNAGCTAGAGGTGCAAAGCGCGTACGGTTACGTGAAATCAATACCCCTAAGACCAAT  
TTTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACA  
GGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCA  
GCAGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAG  
CCCAGAACATGGCTATTATGAGGGATCCGCTCTNATTTGGGACCCTCCTCATGTAATATTAGTGTGTGGCG  
AGACGGCCTTCTCGGCACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTA  
GGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGG  
GACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGGTACAACGC  
CGCCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCAC  
GTAGCAGAGCAAGAAGTTGCTTGTAACTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCAC  
AGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAA  
GTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGA  
TTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACG  
AATAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTA  
CCCGGTGAGGACTTTAATAGGCGGAGGTCCTGNNACTCACTTAACGCAGGATACGATTGGAGGGCGGAAAT  
CTCCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAATGACTCAGGATTCCGGCAACCGTA  
ATCCCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGG  
CCGAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCA  
GGGCTTGCGCCTAGCATTGATTTCTTTGCTTAGGCACCTTCGTAGTGGGACTGATCGAAACGAACGAACT  
GAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTC  
ATGATAGNATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGA  
CTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGCTTGAACGTGG  
TACCATAGACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGT  
GACTCTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACC  
AGCTACCCCGCTCCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTT  
GGGAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAA  
CAGCAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGG  
AATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACACAAGGACCACGGGGG  
CATGGAAGATTGTCACCATAAGCAGGGAACNTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGA  
GTTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCA  
GAAGACNGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAA  
GACTGGGAGAAGTCACGCTATCAGGAACTATGTACGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGA  
TGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGC  
TCCGTACATAACCCTTCGCAAAGGGAGGAATTAGCAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAAC  
TCAGTTAGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGC  
GTGAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCC

CAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTT  
GGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCC  
CCGGATGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTA  
ACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACC  
ACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGT  
AGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTCCGCGCTTG  
CAACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAAGTGGATACAAGG  
ATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAATAATTCTATCACACAGTGCCTGCTTAACCGGTG  
ACGGANGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGG  
AGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTG  
CGCACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATC  
GCTGAGGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACC  
CTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTG  
GTTAAACTACAGGTCTCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAG  
AGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGA  
GGATCCGCCCGCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGGA  
GGATACACAGGTCCGAAGGACGAACAGCTGANAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTG  
GACTATAACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGG  
GGAAAGGTCCGAGGCGGTCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAAT  
GAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACT  
AGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGA  
TAAGAGCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCNTTAAAGAACTGATTACA  
GCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGAC  
TCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTANNTCATAA  
ATCCAAGGCAATCTACTTCTATTAGGGTGGGNATCGCTGCTAGGCACCGGCGGGCCAGAAGGGGAAGGGAC  
GGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCACTGGAGTGGT  
ACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGA  
ACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCG  
GTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCA  
CATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCNG  
AAGATACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTC  
CAAATGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGA  
AAAATCTACTCCGACGGGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATT  
ACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCG  
CTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCT  
ATAACACCTAACAGCAGACATTGTGCGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTT  
GCCCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGA  
GGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGAT  
AGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCA  
CCAAGGTTCCGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGC  
ATCAAAGCCTTACGTGGGTGCCCGGTGCCGCCANGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTC  
CCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAG  
GGTAGCGTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGG  
AGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAA  
GCTACGCTGTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGC

TGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGCCTTTGGG  
CTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTA  
GAGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGAC  
CGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTA  
AAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCC  
CGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATG  
CGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGGTCCC  
GACGCATGGTATGTATTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCAT  
CGGCTACCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCCTTCAGGCGANGCATCGT  
GCTACCAGCCCGGATAAGATAACCCGCAAAGAGTGCATAAAG

>P34, London\_28, VIM-2, 02.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATATCGTCTGCGGTGCAGACTGCCTTGTAGTTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTGTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCTCTTTCTTAAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAG

CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCGCGTTTGCCTTTGCC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGATCGGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCGGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCGGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCTCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTCTTGGAGCCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATATCACCTCTTCAGGTTCTTCGTGCCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGTC  
CCTAATAGATGTAATGCACTCAGAGTCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTGCAAGGCGTTTCGGTGGG  
GCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
TACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACA  
ATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCG  
TCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCCTCCGGTATACATTTCTTCCGCCTTGGCGTGCC  
CCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTC  
ATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
CTAGCCTGCCCTTTGTAGCCGTCACCTTAACTCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGA  
AGTCTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTA  
TCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGTTGT  
GTAATCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCT  
CGGCCGACCAGGGCCACCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGACC  
CTTGATTAACCAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTC  
GAAATCCCCATTAATACAGTAACTACTAGCTTACTGAGTTTCGACCGGGCGGCTCACGACGCTTACCCCCGCG  
CGTCCGCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTGCTGGGGTCCCTCCCTTACTATGAGTAAA

TGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTTCC  
ACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCCGGTTTCCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCCGGTCAAGATAAATTTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTTCGTCGCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTCCGCTTCCCTGCCAACTATTGTAATGGCGNGCACATTA  
AACCGCTGGGTAAGGCGCAACTTTCGCGAAGTGTGTTGCGGGCGCTCGACACCCGGCCGGGGGACTTTATACGC  
GCCCCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGCTACTACGC  
CTCCCCTTTCAGACCCTCTCGTAAATGCTGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCCA  
CCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCC  
GCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCAC  
GACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTCTCTGACCCACACAGGGGAAGTCTCCTCCGT  
ACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTT  
CGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCC  
GGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCTCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGTTCTGACCTCCATCCAGATCATTAG  
CCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTC  
CAGGGTATTTGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTG  
GGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTG  
GGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCT  
TTTTGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCT  
GAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAGCCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTAT  
TGCCGTTGGTTCAGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCGGCTGATGGTCCATCCGC  
GTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGC  
TCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAAT  
ATCCCTGCCTTAGCACAAATTCGTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTT  
CAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGG  
ACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCAT  
GAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGA  
GAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTT  
CCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTC  
AAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTTCGCCGAGCTAAAGAAACCG  
GGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGA  
ATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGG  
TCCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACATCACCT  
CACCCCGGTGCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACTCTGCCGAGTTG  
CTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTACCATTTGTCCAAT  
CACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCCCT  
CGCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAG  
AAGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTG



GATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCT  
AGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTCAAGGCT  
TTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGTGTCTACATCCA  
TGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGGCCTATACAGAAAGCTGGGGGACCAGGGATTGCACG  
GCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAG  
AACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTT  
CGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCGGCGGTTTTT  
GCGCAATTCTACGGGACGCACCGCGTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGA  
CGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAG  
AGCCCATCAGTCCGATCAGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTT  
TAATCTATTCCACCTTGGCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGTGAAGA  
GTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGA  
ACGTCAGATGGGCCGCCACTGCAACTAATGCCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAG  
TGAGCCGTGTGTAGAGGGGAAGCCCGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTAC  
GAAACCGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGA  
CATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAG  
GTCCCGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAAT  
CTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGT  
AATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCCCGGAGCAAGTAACGACA  
GAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGG  
TCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTTCAGAACGC  
CGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGT  
CCTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCG  
ACGGACTGACGCCGGGGGGATATTACCATTGTGGACNNGACATAGCCATTCAATGGGCTCTCTCGTTCAGG  
GCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACG  
ACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAAC  
GAGGCGACTGTGTCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTTCCACGCCCAAGGCTCTCGGCGCA  
GTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATC  
GAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTT  
GCCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAG  
GAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTA  
CCGGGTACGCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTAC  
GCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGCTATACTACTACCCCAAC  
ATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGG  
TGTATGTGTAAGTGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCA  
GCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCGCGAGTCGGGCCCGTATTACCAACGACGCAGACCAAAAG  
AGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAG  
AGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAAGAGCCCT  
ACCCACATCGGGCGGAAGCAGACTTGAACCAACTTACTGGGAACCAGAAAGCACGCGTGCCTTCCGCTGA  
CTATCGACCCGCTGCTACCAAGCAAGCATCCCACAAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGG  
GTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTGAAACCAGGCGACCGGGCAATA  
CAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGGCCGATGTCATATA  
ATAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTA  
CGTGGCCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCG  
TCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAG

TCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCA  
AAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCA  
GAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCC  
CACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATC  
GTTCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCG  
AGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGC  
TGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGG  
ATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATA  
CACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAA  
CGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTA  
AATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGT  
CTCCGCCGACCAATTGCCCTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACG  
ACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTC  
GATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCCCGCTTTAAGTCAGCG  
GACCAAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAAC  
GCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTG  
ATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGG  
CCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAG  
ACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGC  
GACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGG  
GTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGTTGATGTC  
AAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTG  
CGTGACCTCCAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAA  
ACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGC  
AAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGT  
GCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAA  
AGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGT  
TCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTC  
TTACNCCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGA  
CGGATTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAATTA  
GCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGAT  
GGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGA  
CGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAACAGCCCTAAGGGCCAAGCTGCCGGAT  
TGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACC  
CCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATT  
TGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAA  
AAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGA  
AGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTAT  
TATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGC  
ATCAGAATATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAATAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCCGTATGAGAGCCCA  
CGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATTCCGAACCGCCACGTAGCAGAGCAAGAAGT  
TGCTTGAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTG

GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGTGCACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
TGATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTAAGTGCATAACGAAACGAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCAGTCATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA  
GCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACA  
AAGACACCCCATTTGCTGCTACAGAGGTGCTCATTGTATGGTGCATACGCAGTGACTCTCAGGTTCCAATG  
GCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCCAGAAGTTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGCTCTAAGGCC  
AGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGNGG  
TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCA  
TAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTACATAACCTTCGC  
AAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGG  
GCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCT  
ATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGA  
GTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCAC  
ACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTG  
GCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACGCCCCGAGCGGTTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGA  
GCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACCTGAGATACAAGGATCGTATGGACCCTC  
AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
GTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAAT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTGC CGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCC  
TAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGACGGGGAAAGGTCCGAGGCGG  
TCCAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTTCG

AAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGACAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGC  
GAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTACTCTAGCTGAAGATAACACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTGCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTTCGGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCGCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTCGGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P29, London\_12, VIM-2, 05.11

TCCCTCGTCCCTAGTATGAACCTCTCTTACTGCTGTCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAAGCTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTNTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAAGTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCTTGAGTGAACAG

AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTTCGTGCGGTGCAGACTGCCTTGTAGTTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTGCGAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGNCTCATCAATGCGGACTGACTCCACGCTCCTCC  
TCGCAGGTAATCTTTCCGGTAGTAATGGAGTGTCCGGTGCAGTATTAGCACGCTTACTTACGGAGGTACC  
CGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAAATATGCCTTTCAGTAGCCCCCAGCTCCCT  
GAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACACCACGGCCGAGCGCGTCCAAAGAGTTAG  
CTTACC GCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACG  
CGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCG  
ACCCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTA  
CCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTAT  
AAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGATTA  
GTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTT  
TCGGTTCCTCTTGTAAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGG  
GTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGC

T T A C T C G C T C T T A T C C T C G C C A G G C A G T T C A G C T A A A T T A T C A C C C T C T T C A G G T T C T T C G T G C C C G G T T T G G T T  
T G G G T C T C C T T C C A T A T C A T T T A T C T G G C G T C T C A C G G T C T C G A T G C A A G G C C C A C T G C A T C C A C T A T C G C T T T T  
A C G A G A G T A A T C A T T C G T T A C A C T A T T G G G T T G G C G C G C A G C T T C T A C C C T G G C T G C T C G T T T C C G G G G C T G  
T C C C T A A T A G A T G T A C T G C A T C A G A G T G C T T C C T G C T G G T G T C C A A T C T C A T G C A C T A T G T C G T C A G A T G T T A G  
G T T C G G C G T C G T A G T T T T A C T C G C A A C C A A T C A C G G G T C T T T A A C C C T G C G T A T C C T C C A A G G C G T T T C G G T G G  
G G C G C T G C G T T A G A T C G A A C G C T C C C C A C T A A A C C C T C G A A C A C A A G C T A G T C T C C A T T C T A G G C G C G C G A  
T T T A C C C T T G A G C T T T C A A G A G C T A A T C C C G G G G A C T C C A A C A G C A T G A A C T T G T T T T A G A T G C G G G G T G C G A  
C A A T A C C G A A G C C T T G A G C T A A A C T G G C A A T A A G A T T A A C G A T C T T C C A T C A C G A T T G G T C A C T C G C A T C G T T C  
G G T C T A A A C A C T A T G C T G G T T T T A C T C C C T A A T G A T C G G T C C C G T C C G G T A T A C A T T T C T T C C G C C T T G G C G T G  
C C C C C C T C T C G T T G C G T T T A T T C T T G G G T T C T G C G C T T C T C G T G C C C T T C C T C G C G A A C A C A C A C T C C G G C G C  
T C A T T G C G G C G T G G C C C T A T G G G T T C C G A C G C C G C T A C T T A A A A G T A G G T C A A T G T C T G A T T T G T A C C C A A C G  
C C C T A G C C T G C C C T T T G T A G C C G T C A C T T T A A T C C T G A G G G C T G A G C A G C T G T G C G C C A G A G T T T G T A C T G G T  
G A A G T C G T T C G A T C A T C A C T T T G A G A A T A G C A T T G C T C A A T T C A C C A A T C C G C G A T T A C T A T T G A G T G T A T C C  
T T A A T C G T C A C G C C G A T G G T C C T G T A A A A C T A T C G G G A C C A C C C G C C G C A T C T T A T C G A T A C C C G C A C T G A C A T  
C A G T G C T T C C C C T G T A C G C C G A G T T T C T G C A C A A A G C T T G A G A T C G C C G T C G G A T T T G C T C C C T A C G G T A A C G C  
G G C A A T A C G A G C G A C C A A T T A A G C C C T G A C C A G A G T G G C T C C T T C C G T A G T C T C A C G A C G A T A C C A T A T T A T  
T A T G C C T G G G C G C C T C G A G A G A T A G C G T G C A G T C C A C G C C C A G C T C T T T G T A A A G C T C A A T G A A A G G C A T T C T  
G T G A T T C T A A C C C A G G T G A C G G G A C G A C T G T C A C A G A G T G A T G G C C C C G G C C T T A C T A G C C T G C A T A G C T A G T  
A T C T G G G G T G A G C A G C G G C C C T C G T C C C G G T T T T C C T G T T T C A C A C T G T G C C C A C T G A C G T T T T A C G A C G G T T G  
T G T A C T C G T G G A T G C C T A T C G C T T T T T C T T C A T A A G T A A A C A T A G G A T T G T C A A T G G A G G G G G T G C G A G C G C  
T C G G C C G A C C A G G G C C C A C C C T C G C G G A C C G G C T T T G T G C T G C G G C C T T C C C C C A A T A T C T T C T T C C A T T G A C  
C C T T G A T T A A A A A C C C T C A G T G G T A G T G G T C C G C A T T C C C G G C C C T A C T C A T G T A C G C G C T C T T T G C T C A G C  
G A T G C T A T T C T A C G T T G C T C C C G G G T G A G C G G T G G C C A C G C G A T C T A C C C A A G T T T T G T A C A G A T C C G T T A T G T  
C G A A A T C C C C A T T A A T A C A C G T A A C T A C T A G C T T A C T G A G T T T C G A C C G G C G G C T C A C G A C G T T C A C C C C C C G  
C C G T C G C C C A C T T G A A G G T G G C G C A T C C T C T A C A G A G G C T C T T G T C T G G G G T T C C C T C C T T T A C T A T G A G T A A  
A T G T A C C A T T A A T C A G T G A C G C C A T T G G A G G T A C G G A T T T G C C G G C A C G G A T C T T A G C T G T G C C C T T C T C T T T C  
C A C A T C C C C A G A T T A C C C A A A T T C G C G C G C A G C T T C C C T A G T A C C C G G C G G A C A G A G A A T G T C G G T T T C C T T A C  
T C C C C T A G T G G G C G T A T C G C G A C C A C T C A A T C G G T A T C C T C G G A G C C A C G T A T G A C C G G G T C A A G A T A A A T T T  
A G A T T T A A C G T A A G A A G G A T G C C A G A C A T A A A C T A A C T G T C A T C G T A A A C G T G C T G A C A A A A T T A C C A T T G C C  
C T T A T T G T G A C G G G A G A T C C A A A T A T G C G G G T A C C T T T A C G C C G C T T T C T G T T C G T C C C C A G A C T A G G T T A G  
G A A C C A T C C A G T A C C T C T T C C G T A A C T C G C T G G T G T C G G C T T C C C T G C C A A C T A T T G T A A T G G C G A G C A C A T T  
A A A C C G C T G G G T A A G G C G C A A C T T G C G G A A G T G T G T T G C G G G C G C T C G A C A C C G G C C G G G G A C T T T A T A C  
G C G C C C C G C C T G G G C C C G T C C C C G A G A G C G G A T A G C T C C T A T A A C C C T G C A G C C A C G C G G C G G T C A C T A C  
G C C T C C C T T T C A G A C C C T C T C G T A A A T G C T G G G A G T C T C C T T T G A C C C C G A G G G G T C C C G A C G T A C C T T A C C  
C A C C T T A A G G C C A T A G C T G T G C G C C T T A A T C C G G G T A T T T G T C C C C C C C C G A A G T C T C G C T T C G G G G A T T C C  
C C G C A C C G C C A C G T G T G G G A T C C A C C G A A A C G T A G G C G T G T C T G C G C G C C T T G G C C A C C T G G A C T T G A G T C A  
C G A C C T C G A T C G G T C A A G C G A G G G G T A C C C C T G C A C A T T T T C T C T G A C C C A C A C A G G G G A A G T C C T C C T C C G  
T A C G G G A G A A G A A C T A T T T T C A T G T T T C G C C G T A C C C T A C G T C G A T C A G G C T C G C C G G C T C T G C C C A G C A C A C  
G T T G G C T A A C C G C T C G A A T T A A G C C C C T C C C T C T T A T C C C C T C C A G T C T C G A A T C T C C C G G T C A T C A T G T C C T  
C T C G A C C C C C G C T T C T A G A C G A T A G G T T A T T C T A A G A A T C A G C G G T G G C C C T C C A T C A C G G C C A C C C A T C G A  
G T G T C A G C C G A G C G T G T T T C T G T A T C A T G C A T G C T C C C C G C T C T C G C G G T G G C A C G C G G A A C C A A T T T T G T  
C C G G A C A A C A C T C A A A A G T C G T G T C G G G G T C A C G A C G C C C C T C A G T A A G A C T C T C G C G C T T G T A G A C G G G T A  
A C A A T T T G A C C C A T C G C T G G G A C C A C T T A T T A C T A C A G T G A T C C C A A A A C C G G T T T T C T G A T G A C T C G T T T G A C  
T G T A G G C C C C T T C T A C C T G C G C T C C G A C T T T G G A G A G T C T C C A T G C T A C A T C G T T G G T A G A T A A A C G A G T  
C A A G T C C G A G C G A G C C A G C A T C C T A A A T G C T G C A G T T A T C C G C G C C A T G T T C C T G G G C C A T C C A G C T G G G A T T

AGTCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTTGGCCAGGGTGTTTTGTTCTGACCTCCATCCAGATCATTC  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTCTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTT  
CGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCGGCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTATGTCGCCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCNCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCCCTGAGCGCGCTGTCTACAT  
CCATNGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGACCAGGGATTGC  
ACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTCTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTTCGAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA

GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAA  
CCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTCGAACGGCGGCTAAGTAGGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCCTATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACATCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTTCCGNTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA



GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTCTGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTTACCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT  
GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGCAGGCGGAAGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCCTGCGTGTTGTGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCG  
TCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCNATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAG  
CATTTGATTTTCTTTGCTTAGGCACCTCGTAGTGGGTAAGTATGCGAAACGAACGAAACTGAACGTGGACAAGA  
GAGATATGCGGACGAGACGAGAAGCGCTTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGG  
GGCGGGGTGAGGGAAAATGTAGCAGGCTTCTGGGCTAGTTGCCCTTAGGCCGTGACTATGATGAAATTGA  
CGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTAACGTGGTACCATAGACACGCA  
GACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCC  
AATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGCTACCCCGCTCCA  
AGTGCACACGTTTGGTGTGAGGTATCAAATGCTTCCACGACGATTGAGAAGTTTGGGAGGAGCTCTTG  
GCATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAA  
GGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGG  
GGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCAGGGGGCATGGAAGATTGTC  
ACCATAAGCAGGGAACCTTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCC  
GCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA

CGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAA  
GCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTTC  
GCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGG  
CGAGTCCAGTAGTCTCCACCAGTCTAAAGGAAGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCTCCGGATGAGAGCCT  
CTGGCGACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCAACAGTTCCTCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACAGGT  
CCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCC  
GAAGGACGAACAGCTGACAGTGAAGCACTATTGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
CGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTTCTTAACGGGTGAGCTGGATTATGGCTACACCCGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAACGAAAAATCTACTCCGACG  
GGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTGAGTTCATCTCCTCCGCTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCTGCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG

GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTGATGGGTGCCGGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTACAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P53, London\_9, VIM, 02.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGNGACTAGCTCTCCCTACTTGTGAAGTTGGCGTTGGA  
NCGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATNT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCNTTLAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGC  
CCTATCCGTTTACGATCCGTGCGCGATCTTGTCTACGGACNCCACCTCACTAGTTTCTGTTATATGGTTCCGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGA  
CACATGCATTAATTGTACAATAACGCTCTGCGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCA  
TTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAAT  
GTGTATTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTNTAGCAGTTGTTNGCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGTCCAATC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATAACCCATCGGGGGTTGATCATAATTGCGT  
GGGCGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
TGTTTTACCACTTACTCAACTTTTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGAT  
CTTTAGATCGTTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGC  
CCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCC

AGCCGATNTGGATCTNCATTANATTAACGGCCTATGCTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATCCGGCCCTTNCACATATAGGCGTGCCACA  
GGACTATTTGTGGACATTNCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGG  
TTGCTCGTACCACATTATCCTCCTCTTTCTTTAAGGAGNGTTGGGCCCGCTATAGGCGCGCTAAGGCTCG  
ACCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCT  
ATCCTCGATACGCAATGTAGGTGGAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGC  
CACGAGAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCT  
TTGCCGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCGAGTTCCCGTCCGTGAC  
TCACGAACATTTTTCGGCCCTCTTTCTGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
AGTGTATCACGCTCGCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGC  
CATATGATCTCCCGGTATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGG  
TGACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGA  
GGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCT  
CCTCCTCGCNGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGC  
TCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAG  
TTAGCTTACCGAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCAT  
TACGCGCTGTGCTGCACTACAGGATACGGGTCTTCCAGGTGNGTGGGTACATTATTGAGTGAATGCTGACC  
ACCGACCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTT  
GTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCTCCATACCGCCAAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCGCATACCAAAC  
AGATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCAT  
CCTGTTTCGGTTCCTTGTAAACAACAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCTTGCCTTCGTCNNNTAGCGTAAATTTCTTGGAGGCCCCAGGCACTGCCTACAGATTACTAATGAT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCGGTT  
TGGTTTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGNNNNGCCCACTGCATCCACTATC  
GCTTTTACGAGAGTAATCATTTCGTTACACTATTGGNTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCG  
GGGCTGTCCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGA  
TGTTAGGTTCCGGCGTCTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTT  
CGGTGGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGC  
GCGCGATTTACCCTTGGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGG  
GTGCGACAATACGAAGCCTTGGACTAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGC  
ATCGTTCGGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCT  
TGGCGTGCCCCCTCTCGTNGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACT  
CCGGCGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAGTGTCTGATTTGTA  
CCCAACGCCCTAGCCTGCCCTTTGAGCCGTNACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
TACTGGTGAAGTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAG  
TGTATCCTAATCGNCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCA  
CTGACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGGAGATCGCCGTGGATTGCTCCCTACG  
GTAACGCGGAATACGANCGACCAAATTAAGCCCTGACCAGAGTGGTCTTCCGTAGTCTCACGACGATAACC  
ATATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTGTAAAGCTCAATGAAAG  
GCATTNCGTATTCTAACCCNGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCAT  
AGCTAGTATCTGGGGTGGAGCAGCGCCTCGTCCCGGTTTTTCTGTTTCCACTGTGCCCACTGACGTTTTNCG  
ACGGTTGTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTG

CGAGCGCTCGGCCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTC  
CATTGNCCCTTGATTA AAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTT  
GCTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATC  
CGTTATGTGCAAATCCCATTAAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTC  
ACCCCCGCGCTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTTACT  
ATGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCC  
TTCTCTTCCACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCCGG  
TTTCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAG  
ATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTA  
CCATTGCCCTNATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTNCGCCGCTTTCTGTTTCGTCGCCAGACT  
AGGTTAGGAACCTATCCAGTACCTCTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGN  
GCACATTAACCGCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGAC  
TTTATACGCGCCCCGCNTGGGCCCCGTC CCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGNGGCGG  
TCACTACGCTCCCCTTTCAGACCCTCTCGTNNATGCTGGGGANTCTCN TTTGACCCCGAGGGGTCCNGACGT  
ACCTTACCCACCTTAAGGCCANNNCNNTGCGCCTTAAATCCGGGTATTTGTCCN NCCCGAAGTCTCGCTTC  
GGGNNTCCCCGCACCGCCNCNTGTGGGATCCANCNNNACNTNGGNGTGTNTGCGCGCCTTGGCCACCTG  
GACTTGAGNCACGACCTNGNTCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTTGACCCACACAGGGGA  
AGTCTCTCCGTACGGGAGAAGAANTATTTTCANGTTTCGCCGTACNCTACGTGATCAGGCTCGCCGGCTC  
TGCCAGCACACGTTGGCTAACCGCTCGAATTANGCCCTCCCTNCTTTATCCCCTCCAGTCTCGAATCTCCCG  
GTCATCATGTCTCTCGACCCCCGCTTCTAGACGATNGGNTATTCTAAGAATCAGCGGTGGCCCTCCATCAC  
GGCCACCCATCGAGTGTGAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCGCTCTCGCGGTGGCACGCG  
GAACCAATTTTGTCCGGACAACACTCAAAGTCTGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCT  
TGTAGACGGGTAACAATTTGACCCATCGCTNGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTNGA  
TGACTCGTTTGACTGTAGGCCTCTTCTACCTGCGCTCCGACTCTTGGANGAGTCTCCTATNCTACATCGTNGG  
TAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCA  
TCCAGCTGGGATTAGTCGTGCCCGTGAGGCTN TTTCCCGCCAGTGTGGCCAGGGTGT TTTGTTCTGACCTCC  
ATCCAGATCATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATAC  
AGTCCGNGTCTACTCCANGGTATTTGGACCATCAAGTGC CCGTACAAAGAAATACCATAAACACCCCCCAA  
GCGCCTGTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTT CAGCGGGCACTACTAATGGTACCA  
GTCCCCGCATCTAGCTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCT  
AAAGCTTTCTAATTCTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGG  
CGTGTTATTTGACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCG  
GCGCTAGTGGCTTACTATTGCCGTTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCNGGAGCCGCC  
CGCTGATGGTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTA  
CTACAACAATCCGTTNCGCTCTGCTCCTCCTAGTCTGNNTCTGTGGATCCTTATGCACAGTATAAACGGCTGAC  
TCAAGGTAGCATATCGAATANCCCTGCCTTAGCACAATTCGTAGCATCATNACTTCTACCCTCATTA ACTGTTCC  
GAACATCCAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCT  
CGATGACACTCGCAGTGGACGTGCCCTTGC GCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACC  
TACTCACAACATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGC GTGATATCT  
GTTAGCAATACATGGGGAGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTT CATAGG  
ATTGACCGCTATTAAGCTTCTTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCNGCTGATT  
GTGGCTCGGGAACAGGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTC  
GCCGAGCTAAAGAAACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGC  
GGCTAGTCGACTCCTAGAATAACACNGNCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGNNGAAGAC  
CTCCATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGNAGCATGCGGGCTGGACCGGCCTACCA

AGCGTTGGCACGTCACCTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGG  
GGACACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGT  
TATTTACCATTTGTCCAATCACATTCGGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGA  
TTNCGTGTACGTGCCCCCTGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTA  
GACCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTACCCTTCTAG  
TCACTGAGTACGATNTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTT  
CNCCCCNCTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCAT  
ACGATAATCTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTT  
GAGCGCGCTGTCTACATCCATGGNGTCCCTATACCTTAGTCGGATCCTGTTTCGNGGCCTATACAGAAAGCTG  
GGGGCANCAGGGATTGCACGGCAGCGGAGGTGATGTCCNNGGCATGGAGATTATCCCTATCAGTGGGAC  
ATGGGATCGAAGAGCGATANAACCTGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAG  
GCTTNGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGAGCGAGATCGCATCAGGCCTGTCCCTACGTT  
GCGCTGGCCGCCGGCGGTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGG  
GGAAAGCACGGCCTAGCCTGACGGATCCAGTCTAACCAGTTTTAGTTCGCAAGTGAAAGTGTCCCGT  
GAGCACTTCTCTCCTGAGTAGAGCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCAT  
ACGTTCCCGATATTGAGCGCTTAATCTATTCCACCTTTGCCGTGCNTGCTGTCCATATGCCACCAAACGCAT  
NCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGC  
TGGCTAGTAAAGTGGCCTGCGAACGTCAGATGGGCCGCCACTGCAACTAATGTCCTAATCCTGACGGTTGG  
GCTTCTCAGAGCCCAATGCACAGTGAGCCGTGNGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTG  
CTCCATTTGGCATTGGGTGGTACGAAACCGCACTNGGCAAGCNCAGCTCTCTTGTACNGCTGGGAAGGTTG  
CAAGAGACAGTTCCAGCACATGACATTCCGCCACAAGCTCTGCCACNCGCGTGGTAAAGTAGGGGGACAGCC  
GAGAAAGACCAGGTGCGAGTAGGTCCCGTTNGAANATGTTAACTTTGGAGCATGCTTTATTCGNACTCGGG  
TTGGGGATCTTTCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCAC  
GTTCTGCCTCGCTCCGTAATANGAACAGCCGGCGTGCCCGTAAAGCTACACAAAATCTATAGGGT  
ATTNGCCGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACT  
AGCCGNAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAA  
TCACCGTATGGGGTCAGAACGCCGATAGTGGCGCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACG  
CGGGTATCAACAGCCGACGGGTCTTTTGGAGTCCGCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCT  
GGTCTAAAAGGCTCGGCAACCGACGGACTGACGCCGGGGGGATANTACCATTGTGGACCGGACATAGCCA  
TTCANTGGNCTCTCTCGTTCAGGGTCCGTACAATTGGCGATCTCATCTGTGCGGAGGGGTTGAGGATTACTGA  
GCGCGGAGCCAGCGGCCCGACGACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGC  
TAGGGGGGTTCCACCGCGACAANGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTC  
CCNCGCCCAAGGCTCTCGGCGCAGTGCTACATGTACCATAGGCAACCCGCTTNGTGGACGTATAAGCAG  
AAAGGGCGACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGNGNTANATCTCGC  
TCGGGGGGCAAGTNGGATGAGGTTGCCNGAGACCAANGNCCGACNGTAATTNCCATAGGCAAACCCCTCCT  
TTGAATCTGTNCCGCTATTCTGGATAGGAAGGAAGTACGAACTANNNNNNCCCGTGTCAAAGACAGCGAC  
AGNNAGGAGCTGGATGATCAGTAGCTACCGGTACNCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAG  
ATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCT  
ACGGCGTCGNNTATNCACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCT  
AAGTAGGGGGCTAGGNCNCGTACGGTGNATGTGTATTGGGCCGCTTATCTGGNCACTAGNAATGCCAGA  
ACCCCTAGTACNTGGGNGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGC  
CCGTATTACCAACGACGCAGACCAAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCNTCGT  
NACCCNGTCAGCGCCANNCCCNCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACG  
GCGTCGTGTACGATTNACAAAGAGCCCTACCCACNTCGGGCGGAAGCAGANTTGAACCAACTTCACTGGGAA  
CCAGAAAGCACGCGCGGTTCCGCTGACTATCGACCCGCGTGCTACCANNCAAGCATCCCGNCAAATCATGT

CCAGTATACCTCCTTNGNTCCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGANGTCACGTTAATTGAAATCG  
ATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCCTTTTTGACACTG  
AATCGCGACCTACTNGCNGATGTCATATAATAAACGAGACCGGGCCCTACAGTTGTCGTNAAATGGACTT  
ATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCCANTTCCCACTGGCACAGNCAGCGCTGGGGTA  
GTGGCACGAACGTTCTACGAAAGAGTCCNCGTCTAANNNTTCNAGTTGACCGGTCAAAGGTCCGGCGGTTG  
GCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTNCNGACGGCTCTTCGAGACTATCCCAAAGCCTCTCT  
GGGGATAGCAGGAGCTTAACTGTCCCATTCAAAGAANCCGCTATCGGGGACTAGAGAGAAATATATGCCT  
ACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCANAGGA  
NGGACAGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGNTGGCANATTACGAACATCAGTG  
TAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAA  
GNAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGGAATCGGATCGNATGAAAAAGCTGNGCATCCGG  
AAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTANAC  
CTNCCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCNACTGGGGCTTC  
GGACATTGATGTGGCNGTTACANNCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCCGTACGT  
CCCCCGATGCCGAACCCAATCCAATAAATTTAACGCCACGAACCGCTTCAAAAATGGACCTNCAGACG  
ATTGAGCTTGAGCGTACCCAAGGGAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACC  
GGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCGANCAATTGCCTTCGCGAGTGCCGCACCCG  
GTCCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGAGACCCCGTGAATTCGGTAGCGCAGTAGACCT  
TTCCGNTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTNTATTAGTGAAGT  
AATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGTACAGT  
TAATAATGACAACGCCAGAGCTGGATACGAAGTAACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGT  
NTCAAGTCGGGGGGGCGTCTTAGGAATCGCGGGTGANNCCCTGTGAAGGGAGATGAGGAAGGAACAGCG  
AGCANGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTNGGAGAATACTGCAGATCTGAGGAAAACC  
CACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATG  
TAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAA  
TGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAG  
GGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGTGCTGGA  
CATAGATTAACACAGTGCCGCCAGGGGTCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCC  
GGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGCAAGAGGGGTAGCGGACCAAGAGAGTGT  
CGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACG  
CAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACT  
AAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGNNTTTT  
GGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTT  
GCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCG  
CTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCA  
ACAAGCGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAA  
GGGGTACGAGAATATGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAA  
GGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAG  
CCAAGTACAAACAGCCCTAAGGGCCAAGTCCCGATTGCCGCTGCTANGCNGAAGTGCGGCGGAAGGTGT  
CTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGANGTGCAAAGCGCGTACGGTTCAGTGA  
AATCAATACCCCTAAGACCNATTTTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGNCCGACA  
GTGTGGCGAAAGGCAACAACAGGAAAAGCNGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGG  
CTGTGTGTAACGAAAAGTATCAGCANGCAAGAAATGAAGGCGCNGAATAGTGTACAGGCCAGAAAGCGAG  
TTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCAT  
GTAATATTAGTGTGTGGCGAGACGGCCTTCTCGGCATCAGAATTTTGTGTCGGACGTTAATCAGCCTC

GTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAAT  
GCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTG  
GACAAACGAGGGTACAACGCCCGCTATGAGAGCCCACGGGGGAATCCTCGCTGCGTGTGTGGGCGGGT  
GGTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTGCTTGAACGACTTGACCCGATGAGGAGAGTTC  
AATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGG  
TACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAG  
ATTGTGCGCAGCATTAGATTGCTGCCAAGAGTATGAGGGTGGGACGGCAANGTTAGGGTCGTTAAAGT  
GTTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCG  
ACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATAGCGGAGGTCTGCCACTACTTAACGCAGGATA  
CGATTNGAGGGCGGAANTCTCCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTC  
AGGATTCCGGAACCGTAATCCCAGACGCGCGTCAAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCA  
TACGCTTGTGGGGATCGGCCGAAGTACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAG  
GAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGA  
TCGAAACGAACGAAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAA  
TTCGGCGAAAGGCGGTTCATGATANTATATGGGGCGGGGTAGAGGAAAATGTAGCAGGCTTCTCTGGGCTAG  
TTGCCCTTAGGCCGTGNCTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTC  
AGGTTGTTGAAACGTGGTACCATAGACACGCAGACAAAGACACCCCATGTGCTACAGAGGTGTCCTCATTG  
TATGGTGCATACGCAGTACTCTCAGATTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGG  
GAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCAGCACGTTTGGTGTGAGGTATCAAATGCTCCAC  
GTACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTCANGCTATCTTATGCCATACGAAGGATCTGGCCTGC  
ATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCCGGNNGGGCGNN  
GAAAGAGTGAAAATGGAATACATTCGCGGGGGGTAGAGCAGCGAGTAAAGGTGCATAGTTTAGGCAGA  
CGCAAGGACCACGGGGCATGGAAGATTGTCACCATAAGCAGGNAACTTGTGGTGTAGGTAGCGAGGGCC  
CAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAA  
ACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCG  
AGGGTTGCACGAAGGAAGACTGGGAGAAGTCAAGCTATCAGGAAGTATGTCAGTATACAGGGGCGTNGGCC  
TAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGG  
AGTGAGCCCATGAGTAGCTCCGTCATAACCTTCGCAAAGGGAGGAANTAGAAGGAATCAGGTAATATGCCT  
TGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACG  
TGTGGGTAGCCCCTGCGCGTGAAAAGTTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACT  
CATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGG  
CAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAA  
AGGATATGTATGCCACTCCCGGATGAGAGCCTCTGACGACGCCCCGAGGAAACTATGNACGATAACAGCA  
CCCGAACGCCTGATNGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATT  
GCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTGCTAGTTGNGACG  
GGGAGGCGACGCTTAGATGTAGTAGGCAGCCNCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAA  
GTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGA  
CCGGGAACTGAGATAAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCAC  
ACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAG  
GCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTACTCATGGCCCAACAGTTCTCCCGTA  
CGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAA  
CAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTCCGCAATTCTGGCGCAAAAATCTGGCGCC  
GCGGTAGAGGCAAAGCACCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCA  
AAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGAT  
GGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCA



CCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCA  
CCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCC  
CCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTTAGTTTTCCGATAAAGCCCC  
AACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAG  
GATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCT  
GNGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGT  
GGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGNTGG  
CCATTTAAGAAGTATTACAGCTATTTTTCATGGAGCCGCTCAATAGCGNGCTTTCCTTAACGGGTGAGCTGG  
ATTATGGCTACACCGGAGACTCCAGGCCNCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCG  
GAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGG  
GCCAGAAGGGAAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCA  
CGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATN  
GAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAG  
AACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGT  
GCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAG  
AAGTGGTCACTCTAGNTGAAGATAACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCG  
GGACTACTGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAG  
GGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGC  
GCGCCGCACTCTTGTATTACGATCTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAG  
GTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATG  
GGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTGCGGCTCCGCAGGGCCGGTACGGGAAAGAGG  
GGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACA  
GGCAGAGCCCTAATGAGGCGGTGTGAAAATACTCTCATGTAAAGAGAGGTCCTTGACACGTTTTGAGGG  
TTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCT  
TGTAGGGTACAGAGTACCAAGGTTCCGATCNGGCAACCAGGTCAAAAGACGTCTACGGGCGCCATGGGT  
AAGCGTAATCCGTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGTGGGTTGATGTGTCTGGG  
ACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCG  
GAAGACGTGGTTTATAGGGTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGT  
ATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTA  
ACCNAGTAACAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTG  
CGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCA  
CAACGGCGTGGCCTTTGGNCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGT  
GCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCC  
TTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGG  
TGCCGGGCAAGTGCCTGAAAGTTTTCTGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCG  
AGGAAACAAGTGAGTGCCGAACCATGCGATCCTTGGGGTGCAGGGAAGATGCAGGGCGTCTGCAACGT  
CCAGTGGCACTGTTAGTATGCGANNACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATTA  
AGTGGCGGCTCGGGTCCCAGCATGGTATGTATTTTCATCGAGGTGACANACGGTGAATGGGTTACGTT  
CCACACCGTGGCAGTTCATCGGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCGG  
TCCTCAGGCNAAGCATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>S1, London\_17, VIM, 02.09

TCCCTCGTCCCTAGTATGAACTTCTTTACTGCTGTNCCAAATGGCCACACCGGCGGTCAAATTCCGCCA  
AACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATG  
AGAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGTGAAGTTGGCGTTGG

AACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACNAGTGACTCATACTA  
AGACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCT  
CTCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCT  
TATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCCATAAACTCTCCAACGGGCCTTGAGTGAACA  
GAGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTGCGGAGGGTCTTTCTCGTCTATTCGGCGCTTGTCCCAC  
CGCCCCACTCGGTGCGCCGGCTGGAAAGCTATATAGGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATGAT  
CAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGC  
GGTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTC  
CTGTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAAT  
GTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTCTCTCGAAGGGTCTTCT  
AAGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGTAGTGCAGCCTG  
CCTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATG  
CCCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGA  
CACATGCATTAATTGTACAATAACGCTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCA  
TTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAAT  
GTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATAACCCATCGGGGGTTGATCATAATTGCGT  
GGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCACT  
TGTTTTACCACTACTCANCTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGAT  
CTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGC  
CCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACC  
AGCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTGTGTTAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTA  
TCCTCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCC  
ACGAGAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTGCTT  
TGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGTTCCCGTCCGTGACT  
CACGAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
GTGTTATCACGCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCTG  
ATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGT  
GACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGGAG  
GAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTC  
CTCCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGCATTATTAGCAGCTTACTTACGGAGGT  
ACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCCAGCTC  
CCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTT  
AGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTA  
CGCGCTGTGTCGACTACAGGATACGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCAC  
CGACCCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGT

CTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACT  
TATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGA  
TTAGTACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGGTTGCGATCCT  
GTTTCGGTTCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGAT  
GGGTCCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGA  
GCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGG  
TTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TTACGAGAGTAATCATTTCGTTACACTATTGGGTTGNCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGC  
TGCCCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTT  
AGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGT  
GGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGC  
GATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGC  
GACAATACCGAAGCCTTGAGCTAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCG  
TTCGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGC  
GTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGG  
CGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCA  
ACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACT  
GGTGAAGTCGTTTCGATCATCACTTGTAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTA  
TCCTTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGA  
CATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAA  
CGCGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATAT  
TATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTGTAAAGCTCAATGAAAGGCAT  
TCTGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCT  
AGTATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGG  
TTGTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAG  
CGCTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATT  
GACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTTGCTC  
AGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTT  
ATGTCGAAATCCCATAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCC  
CCCGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGA  
GTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCT  
CTTCCACATCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTGGTTTTC  
CTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATA  
AATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCA  
TTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGTTTTCTGTTTCGTCCCCAGACTAGG  
TTAGGAACCTATCCAGTACCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCA  
CATTAAACCGCTGGGTAAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTA  
TACGCGCCCCGCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACT  
ACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTA  
CCCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATT  
CCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGT  
CACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCCCTCCTC  
CGTACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCAC  
ACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCAATCATGTC  
CTCTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCG

AGTGTGACGCCGAGCGTGTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTG  
TCCGGACAACACTCAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCCTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGGTTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCTAGTCTGCGTCTGTNGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCGGTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCNCTTTTTGGGC  
TCTAGATTTGGGGGCTCCCGTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGC  
ACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCAGTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAANCGGATTTTTAGTTGCGAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCATTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCAC

ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGNCCAGGTGCGA  
GTAGGTCCCGGTTCTGAATATGTAACTTTGGAGCATGCTTTATTTCGCACTCGGGTTGGGGATCTTCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGNCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCAGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCAGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTGGTCTAAAAGGGTTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
ACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT  
CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATACACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCCGGCCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCNGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTAGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTCAACATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGAATCGGATCGAATGAAAAGCTGTGCATCCGNAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCNAGCGGTCCCAAGTAGCCTAACGGC  
GGGGATAATAGGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCC  
GTATACTTAAGTTTCAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAT  
ATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGA  
GCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGACAATCAATTGACAAGGGGAAAAAGC  
GAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGNATGTGGACCCGA  
ATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAA  
GGCGCTTCGATGTGCGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCGCCGCTTTA  
AGTCAGCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATAC

GAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAAT  
CGCGGGTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCA  
GGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGT  
AGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATG  
AGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAC  
GGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGG  
TTGATGTCAAAGTACCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTC  
CGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCCTCCG  
GACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGC  
GACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTCA  
CGGTGGTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGC  
GACGCAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATC  
CGATGCCGTTGTTACAGCAGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCC  
AATTAGGTCTTACACCCTGCCCCAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACAGCCAGTGAATA  
CCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGTGGAGCAAAAACGGTAGGCGAGGAA  
CAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
CATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTAT  
GTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGC  
TGCCGATTGCCGCTGCTAGGCGGAAGTGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGG  
CCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAG  
CCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAG  
CTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAAC  
ATGGCTATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCC  
TTCTTCGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGG  
TAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTC  
ATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTAT  
GAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCCGCCACGTAGCAGA  
GCAAGAAGTTGCTTGAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACA  
GCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAG  
CTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGACGCATTTAGATTTGCTGCC  
AAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTTCACGCCGAACCTGACGAATAAAAC  
GGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGA  
GGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTAT  
AAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAG  
CGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGAC  
TATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGC  
CTAGCATTTGATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATGATCGAAACGAACGAAACTGAACGTGGAC  
AAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTAT  
ATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAA  
TTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACA  
CGCAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGG  
TTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGNAACCGCAAGAAAACCAGCTACCCCGC  
TCCAAGTGCAGCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTC  
TTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCT

AAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGC  
GGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATT  
GTCACCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTAC  
CCCGCAGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGG  
AGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAA  
GTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACG  
CAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACC  
CTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAG  
GAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTC  
ATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTG  
TGCGGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAA  
TGTCACACGGAGCCGCGGAGTGCTTTTGAANGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAG  
CCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGT  
ATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTC  
CACAGGAGACGTTGACGCCCCGAGCGTCTAGTTGTACGGGGAGGCGACGCTTAGATGTAGTAGGCAGC  
CCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCA  
TAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGA  
CCCTCAAGCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTA  
AAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTA  
GGCCATCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAG  
GAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGT  
AGGGAATAAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAA  
TGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACA  
GGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGT  
AACGATCTGGTTGGAGCTCTTGCTATACTGACAANTGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCC  
GCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGG  
TCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATT  
GATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCG  
AGGCGGTCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTG  
GGTGGAGACAGTAGGCAATCAACGCGCTTCAAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAAT  
TTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGA  
CACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCNTTTAAGAAGTACTACAGCTATTTTTTCT  
GGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCA  
TATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAAT  
CTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCT  
TACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTG  
AATTGCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGAC  
TCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGT  
CTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGANTGCCAGCAGAGTAGCTGCACATCTCCCTCCG  
GCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCAGC  
AAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGA  
GCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCG  
ACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCCGCACTCTTGTATTACGATCTTTCTGC  
CTGGATGCGAGACCGATAGTTGTCTGCGTTAGTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTAAATCCAA  
GAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACA

GCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCA  
GCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAA  
ATACTCTCATGTAAAGAAGAGGTCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTT  
ATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGAT  
CAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTAC  
GTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTCCCTAGCTATCCGG  
CTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGATTTGATAGGGTAGCGTCAAAG  
GCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTG  
GCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATC  
CGAATACGACCTTACCGGTGCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTA  
GACGGTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAA  
GGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCA  
CTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCGC  
GAGGTGATAGTCAGTGCAGGAGGTGTAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGGAC  
AAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCC  
TTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCCTAAAATTAAGTGCGGCTCGGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTC  
GTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P48, London\_17, VIM, 01.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATNGCCACACCGGGCGGTCAAATTCGGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCNATTGTCGNGNCTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGG  
ANCGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTA  
AGACATTTAACAAACTGCATGGCATGCACTTNTGNCCTCGTCTGTCTCTACCGAGACGCTGAAAACCGGTC  
TCTCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTT  
AGACTNTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAG  
CTTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCNCATAAACTCTCCAACGGGCCTTGAGTGAA  
CAGAGTGAATCTTCTGGGGGATTGTTTGTGTGCCCTTTCGGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCC  
ACCGCCCCACTCGGTGCGCCGGCTGGAAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATG  
ATCAGACGCTGCTCCAAAACCTCAGTTCGCGGGAGTCCCCTNAACATCTCAGCGTCGTGCACGCGCCGGAGC  
NCGGNCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGG  
TCCTGTAGCNCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGA  
ATGTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTNTCGGTTTCTCTCGAANGGTCTT  
CNNAGTAAGTCGTTAGGGCGGCAGANGAGCACCCCTATCGTCGTCGCGTGCAGACTGNCTTTGAGTCGCGCAC  
TGCTCAGTTTTGCCACCNGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGT  
ATGCCCTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCTGTTATATGGTTCCG  
GTTCTGGCNGCTCTGGCGTGGGTCNAGGGTCTCTCGCGTCGACAACGCTTACGTAGAANCAAGAATGGAAC  
GGACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGNATCCACTTTCCCTATTGCCGATTGGT  
GCATTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCNCCTGCCCAAAGCNTTTAGCCAAACA  
AATGTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAANATNAAC  
CTGCTCGTATGGACATTTNTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCA  
ATCCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGANNATAATTG



CGTGGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCCTCGGCGCTACCAACCGCCCCAATNNTTCCG  
CTTGTCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTANGGTTGAGTCCGACCCCATCATCT  
CAACTTGTTTTACCACTTACTCAACTTNNANTTTCAGTAAGGCACCGACNGCTTTATAGCCCCNCGCTGCTGTC  
CTGGATCTTTAGNTCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACC  
AATAGCCCCACGTTGGTGGCGAGTNNANNTCGTCAGTCCTATATTNCGTACAGGGTCAACGCATAGTCGTNG  
GNTACCCAGCCGATNTGGATCTCCNTTACATTAACGGCNTATGCTTTTTTCCATTTGCACATGAGCACAGCCA  
TCAGGTTAACCTAACTTTGGACCCGCCGGCTAANATGAACNGTTTTCNCTAGACGTTTGTGTTAAACTNCCCCT  
GCTGCGAGCTAGGATCTCGCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCNTNCANATATAGGCG  
TGCCACAGGACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATNNTCTCCANGC  
NCCTGCGGTTGCTCGTACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGNCGCGCCT  
AAGNNNNACCAGCCGCTTGTCTCCTGCNCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCC  
TCCTCCCGCTATCCTCGATACGCAATGTAGGTGGAACATTCGATTTGTGAAGTTATGCGCCTGCGTCCCCCT  
ATACATCGCCACGAGAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGNACTGGTGC  
GCGTTTGCCTTTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCC  
CGTCCGTGACTCACGAACATTTTTCGGCCCTCTTCTCGCTCTAGGCCNTAATTGCAANCCCCGATTCTGG  
GTCGGTTTGTAGTGTATCACGCCTGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTC  
NTGTTCTGCCATATGATCTCNCNCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCT  
AGTATCCCGGTGACGATNCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTNGTGAGGCGGNCGCATC  
ACGGGTGCGAGGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGNCGTCTCATCANTGCGGACT  
GACTCCACGCTCCTNNTCGCAGGTAATCNCTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTANCACGCT  
TACTNACGGAGNTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCNTCGCAACCTGCAAATATGCCTTTCNG  
TAGCCNNCAGCTCCCTGAGACGGCGAGACCNGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGC  
GCGTCCANAGAGTTAGCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTNCGCCGTACGATTG  
CTAAGATATCCATTACGCGCTGCTGCTGCACTACAGGATACGGGTCTTCCAGGNGTGTGGGTACATTATTGAG  
TGTAATGCTGACCACCGACCCTACCGCACAGGGGACTNNTCAGTGAATTTCCGACCGGTGGCGTCTATCCCC  
TTGCTCTNACTTTTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCA  
NTTAGCTTTGCTAACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCCNCTTGAGCCCCTATCCTT  
CCGCATACCAAACAGATTAGTCACCCCTCGTATCGACAGAGACCGACNCCAAATCCAACATCAAGTACTATTN  
CTCCTNGTTCGCATCCTGTTTCGGTTCCTCTNGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAA  
CGCACGTANTCGGGATGGGTCCCTTGCCTTCGTCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTAC  
AGATTACTAATGATGGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTTACGCTAAATTATCACCTCTTCAGGT  
CTTCGTGCCCCGTTTGGTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGNAAGGCCCA  
CTGCATCCACTATCGCTTTTNCGAGAGTAATCATTTCGTTACTACTATTGGNTTGGCGCNCANCTTACTACCCTGGC  
TGCTCTCGNTTCCGGGGCTGTCCCTAATAGATNTACTGCATCAGAGTGCTTNTGCTGGTGTCCAATCTCNTGC  
ACTATGTCGTCNGATGTTAGGTTCCGGCNCCTGATGTTTTACTCGCAACNAATCACGGGTCTNNNACCCNCGTA  
TCCTCCAAGGCGTTTCGGTGGGNCNTGCGTTAGATCGAACGCTCCCCANTAAACCCTCGAACACAAGCTAGT  
CTCTCNATTCTAGGCGCGGATTTACCCTTGAGCTTTCAGAGCTAATCCCGGGGACTCCANCAGNATGAACT  
TGTTTTAGATGCGGGGTGCGACAATACCGAAGCCTTGGCTAACTGGCAATAAGATTAACGATCTTCCATCA  
CGATTGGTCACTCGCATCGTTCGTCNAACTATGCNGGTTTTACNCCCTAATGATCGGTCCCGTCCGGT  
ATACANTTCTCCGCTTGGCGTGCCCCCTCNCGTTGCGTTTATTCTGGGTTCTGCGCTNCTCGTGCCCTNCC  
TCGCGACAACACACTCCGGCGNTCATTGCGGCGTGGCCNATGGGTCCGACGCCGCTACTTAAAAGTAG  
GTNAATGTCTGATTTGATCCCAACGCCCTAGCCTGCCCTTGTAGCCGTCACTTAAATCNTNAGGGCTNAGCA  
GCNGTGCGCCAGAGTTNGTACTGGTGAAGTCGTTTCGATCATCACTTTGAGAATAGCANTGNTCAATTCACCAA  
ATCCGCGATTACTATTGAGTGTATCCTNNATCGTCACGCCGATGGTNTGTAAAATATCGGGACCACCCGCC  
GCATCTTATCGATACCCGCACTGACATCAGTGCTTCCCCTGTNNNCCGAGNNTCTGCACAAAGCTTGAGATCG

CCGTCGGATTTGCTCCCTACGNTAACGCGGCAATACGANCGACCAAATTAAGCCCTGNCCAGAGTGGCTCCTT  
CCGTAGTCTCACGNCGATACCATATTATNATGCCNNGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGC  
TNNTTGTNAAGCTCAATGAAAGGCATTNGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATG  
GCCCCGGCCTTACTAGCNTGCATAGCTAGTANCTGGGGNGAGCAGCGGCCTCGTCCCGGTTTTTCCNGTTTCA  
CACTGNGCCCACTGACGTTTTACGACGGTTGTACTCGTGATGCCTATCGCTTTTTTCTTCATANGTAAACA  
TAGGATTGTCAATGGAGGGNGTGCNAGCGNTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCT  
NCGGCCTTCCCCCAATATCTTCTTCCATTGACNCTTGATTA AAAACCTCAGTGGTAGTGGTCCNCATTCCCCG  
GCCCTACTCATGTACGCGTCTCTTGCTCAGCGATGCTNNTCTACGTTGCTCCCGGGTGANCGGTGGCCACG  
CGATCTACCCAAGTTTTGTACAGATCCGTNATGTGAAATCCCCATTANTACNCGTAACTACTAGCTTACTGAG  
TTTTGACCGGGCGGCTCACGACGCTTNC CCCCCGCGTGCCCACTTGAAGGTGGCGCATCTCTACAGAGGC  
TCTTGTCTGGGGTCCCTCCCTTNACTATGAGTAAATGTACCATTAANNNGTGACGCCATTGGAGGTACGGAT  
TTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACATCCCCAGATTACCNAATTNNCGCGNGCTTCCC  
TAGTACNCGNGGACAGAGAATGTCGGTTTCTTACTCCCCTAGTGGGCGTATCGCGACCANTCAATCGGTN  
TCCTCGGAGCCACGTATGACCGGGNCAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTA  
ACTGTCATCGTAAACGTGCGNACAAAATTACCATTGCCCTTATTGTGACGGGGAGATCCAANNATGCGGGTN  
CCTTTACGCCGCTTTCTGTTCTGTC CCCCAGACTAGGTTANGAACCNATNCAGTACCNTTCNGTAAACNGCTGG  
TGTCGGCNTCCCTGNCAACTATTGTANTGGCGANACATTA AACCCTGGGTAAGGCGCAACTTGNNGAAGT  
GTGTTGCGGNGCTCGNCAACCGGCCGGGGACTTTATACGCGCCCCGNCNGGGCCCGTCCNCGGAGAGCG  
NATNGCTCCTCATAACCTGCAGCCACGNGGCGNNNACTANNCTCCNCTTTCNNNNCTCTCGTAAATGCT  
GNNGANTCTNNTNNGACCCCGAGGGTCCCGACGTACNTACNNNCCTNAAGGCCATAGNNNNGCGCCTT  
NNNTCCGGGTATTTGTCCCCNCNNNNNGTCTCGCTTGGGGATTNCCNGCACCGCCACGTGTGGGATCCAC  
CNNNACNNNGCGTNNCNGCGNGCCTTGGCCNNCTGGACTTGAGNNACGACNNCGNNCGNNCAAGCGA  
GGNTANCCCTNNACANTTTCTCTGACCCACACAGGGGAAGTCCNCTCCGTACGGGNGAAGAANTATTTT  
CANGTTTCGCCGTACCCTACGTCGATCANGCTCNCGGCTCTGCCAGCACACGTTGGCTAACCGCTCGAATT  
AAGCCNCTCCCTCCNNTATCCCCTCCAGTCTCGAATCTCCGGTTCATCATGTCCTCTCGACNCCCGGCTNNTAN  
ACGNNANNTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCNTCGAGTGTACGCCGGAGCGTGT  
TTNCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCCGGACAACACTNAAAAG  
TCGTGTCCGGGTACGANGCCNCTCAGTAAGACNCTCGCGCTTGTAGNCGGNTAACAATTTGACCCATCGCT  
GGNACCACTTACTACTACAGTGATCCAAAACCGGTTTTCNGANACTCGTTTACTGTAGNCCTCCTTCTACC  
TGCGCTCCGACTCTTGGANNAGTCTCCTANNCTACATNNTTGGTAGATAAACGAGNCAAGTCCGAGCGANCC  
AGCATCCNAAATGCTGNAGTTATNCGCGCCATGTTNCTGGGCCATCCAGCTGGGATTANTCGTGCNCGNGAG  
GCTTCTN NNCGCCAGTGTGGCCNGGGTGT TTTGTTCTGACCTCCNTCCAGATCATTACGCCGANACATTGA  
GTGGGACTNTCAACGCGCCAGGGGACCTTNCCTATTTGGTGATACAGTCCGAGTNTACNCCAGGGTATTT  
GGACCATCAAGTNGCCGTCANAAAGAAATACCANAAACACCCCCAAGCGCCTGTGTGTAGTNNNCGCTNTG  
TTTTAGTAGCTTCATATCGNNGTTCAGCGGGCACTACTAANGGTACCAGTCCCCGCATCTAGCTGGGTAGTGT  
ANNNGCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCNTTCTAATTCTTTTTCGCT  
GGAAGACCATACGAGCTCCATCGGCGNTGGCNGGCATGCCCCAGCGGCGTGTATTGANTCCTGAGCAG  
CTGTAGAAGGTGTCGGNGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCGT  
TGTCNNGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCGGCTGATGGTCCATCCGCGNGCTC  
ATGCCTTTCATATTAGTCGAGTCAGGCTNTACTGGCAGNGATTTCTTTTACTACAACAATCCGTTCCGNCTGC  
NCCTCCTAGTCTGCGNCTNNGGATNCTTATGCACAGTATAAACGGCTGACTNNNGGTAGCATATNGAATATC  
CCTGCCTTAGACAATTTCGTAGCATCATGACTTCTACCCTCATTAAANTGTTCCGAACATCCAATGNNGCTTTCA  
GGTACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTNTCGCTCGATGACACTCGCAGTGGAC  
GTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGA  
GGATCTGTTATTCGGGCCGCTCTGTTAGGCTGTTGGGAGTGCNGGATATCTGTTAGCAATACATGGGGAGA

ATCTTTGGTNCTTTACGTATTCTGCTNNTAGAAATTTTACAGCGGTTTCATANGATTGACCGCTATTAAGCTTC  
CTTCATAACCACTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCA  
AGCTGTGGGGTAGTTGGCNAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAANCG  
GNAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCNTAGA  
ATAACACGGCCGACGTTTTNGTGAACCGTTAAGGCGGGTCTGNNGAGGANGACCTCCCATTACAACANCGG  
TCCCNAAACCTTGTGGTAGNCGGGAGNAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTCACC  
TCACCCCGGTTCGGCGTCTACGGCGATCGTCTACTGCNAGGNGNCGGTACCNNCNGGGACACTCTGCCGAGTT  
GCTAAACTGCCCTCCNGTGAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTNTTACCATTTGTCCAA  
TCACATTCNCTGGCCCCCATCTATCGGTAGTTNGTCCCAGGNGGCCTCCCATGATTNCGTGTACGTGCCCCC  
TCGCCCATGTGCGATTTGGTCCACCCGCTGTGGGCCATCTNNATATCCAGCCTAGACCCGAACACCTACAA  
AGANGGAACCACCGCAAGTTGCGTGACGGTTCGGTGCTCNCTCAGTCACCCTTCTAGTCACTGAGTACGATNTT  
TGGATAGTTCATAGGCATGTATNNCNCACGCCGAGTTANCAANTCCTNNNNCTTCTCCNGCTNNTTGG  
GCTCNAGATTTGGGGGCTCCNGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTANTTNGACTCCCTATNGTGTCACTGCGGGCCCTTCTTATGGCTNCGNTCCTGAGCGCGCTGTCTN  
CATCCATGGCNGTCCCTATACCTTAGTCGGATCCTGTTGNGGCCATACANANAGCTGGGGGCANCAGGGA  
TTGCACGGCAGCGNNANGTGATNNCCAGGGGCNNNGAGATTATCCCNATCAGTGGGACATGGGATCAAAG  
AGNGNNAGAAGTGAAGCGCAATTNCAATNCGTCTCTCACGTGTAACCTNTAAGTCAGGCTTTGTCACTG  
GTGAACGTTTCGGGTGCCGCGAGGAGNGTAGCGAGATCGCATCAGNNCTGTCCCTACGTTGCGCTGGCCGGC  
GGCGGTTTTNNNNNATTCTACGGGACGCACCCGGCGTTGTGACNGNTTGACCCCATGATGGGGAAAGCANG  
GCCTAGCCTGACGGATCCAGTCGTNTAANC GGATTTTTAGTTCGCAAGTGGAAAGTGCCCGTGANNACTTCT  
CTCCTGAGTAGAGCCNATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCANACGTTCCCGA  
TATTNAGCGCTTNNATCTATTCCCACCTTNGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCT  
GCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCNTTTCAGCGTGCTGGCTAGTAA  
AGTNGCCTGNGAACGTCAGATGGGCCGNGCACTGNAACNAANGTCTAANNCTGACGGTTGGGCTTCTCNG  
AGCCCAATGCACAGTGAGCCGTGTGTNNNGGGGAAGNNCNGGAGGGACGCGTGTCCACGTGCTCCATTTG  
GNATTGGGTGGTACGAAACCGCACTNGGCAAGCGNAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGAC  
AGTTCCAGNACATGACATTCCGCCACAAGCTCNNCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAG  
ACCAGGTGCGAGTAGGTCCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGAT  
CTTTCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGATAANACCTCCACGTTCTGCC  
TNGCTCCGTA CTGTAATATGAACAGCCGGCGTGCGCCGTAAGNNACACAAAAATCTNTAGGGTATTNGCC  
GAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGNCGTCTGTCTACTNTCCTGTACNCAACTCAGCCGA  
AGACGACGGACAGGNTCCCGGGCGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGT  
ATGGGGTCAGAACGCCGATANNGGCGCCNACNGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTA  
TCAACAGCCGANGGGTCTTTT GAGTCCGCCGCGACNCCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTA  
AAAGGGTCGNCAACCGACGGACTNACGCCGGGGGGGATATTACCATTGTNGACCGGACATAGCCANTNAAT  
GGGCTCTCTCGTTCAGGGCTCCGTACAGTTGGNGATCTCATCTGTNGGAGGGGTTNNGGATTACTGAGCGCG  
GAGCCANCGGCNCGNCGACGGATCGGTGTCAGANNGACGTTTATCGTGTGAAAAGNNTAGGGTNNTAAG  
GGGGTTCCACCGCGACAACGAGGCGACTGTGTGCGAGTANATCANNCANATGTTNTAGTGCTAGGTCCCACG  
CCCCAAGGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGG  
GCGACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGNNANTNNATCTCGCNCGG  
GGGGCAAGTCGGATGAGGTTGCCNGANNCCAANNCCCACANTAAATTTCCATAGGCAAACNNTCCTCTTGA  
ATCNGTANCGCTATTCTGGATAGGAANGAAGTACGAAGTAGACGGCCCCGTGTCAAAGACAGCGNCAGAC  
AGGNNNTGGNTGATCAGTAGCTACNGGGTACGCCTCTNNNNCNATGGGGGGGTAGGGGGCCTATTAGATG  
AGGCCCTCACGTCTCCCTAGTCTACGCNNACTGAAAGCGGGTGTCGAACGTANNGGCCGCTAGAGGATCTAC  
GGCGTCGNNTNTACTACTACCNAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTA

AGTAGNGGCTANNCCTTCGTACGGTGTATGTGNACTGGGCCGCTTATCTNGNNGACTANGANTGCCAGNA  
CCCCCTAGTACGTGGGCGCAGCNTCCAGNGTTGCTATTTGNNAGCCGCATAGGAGGGGTCCGCAGTCGGGC  
CCGTATTNCCAACGACGCAGACCAAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATNNTCN  
TAACCCNGTNAGCGCCATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGNGAAGACTCTGAAAAC  
GGCGTNGTGTACGATTNCAAAGANCCCTACCNACNNNGNCGGAAGCAGACTTGAACCAACTTCACTGGG  
AACCAGAAAGNACGCGTNNGTNGCCCTGACTATCGACCCGCGTGNNNCCAANNAAGCATCCCGACAAATC  
ATGTCCANTATACCTNCTTTGTTCCNNTCTGGGTNGTGCCTTGGTCGTAGGNCNATGTCACGTTAATTGAA  
ATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACACACGNACTCCACGCCGCTTTTTGAC  
ACTGAATCGCGANCTACTTGCCGATGTCATATAATAAAACGAGACCGGGCCNACAGTTNCGTNAATGN  
NNTTNNACTCGANACGCTGCGAGTACTACCGTACGTGGCCATNTCCACTGGCACAGGCAGCGCCTGGG  
GGTAGTGGCACGAACGTTTACGAAAGAGTCNNGCTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCN  
GTTGGCTACTAGAGGACCATGCAAGGCGATNGGAGTCCCTTCANACGGCTCTTCGAGACTATCCCAAAGCCT  
CTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATAT  
GCCTACGGTTNNATNNTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGGCCGGACGGAACNCTTCAA  
AGGAGGGGACAGTGACCGTACCGTCATCAATAATCCACCAGCTGGAACAGGGCNGGCAAATTACGAANAT  
CAGTGTAAGNAGCCTAATTAAGGCGAACGCAGGTATCNTTCCCTNTCGCACATGGCCGACTTACCATTNTGT  
CACAAGGANGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAAAGCTGNGCAT  
CCGGAAACACCGTCTTAAGAATCGCNAATTGAGGGCCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTC  
ATACCTACCAAGCGGTCCCAAGTAGCCTANCGGCGGGGNTAATAGGTGTAGGAGCGACAAGCCNACTGGGG  
CTTCGGACATTGANGTGGCNGTTACAGCCNNGCCGTATACACTTAAGTTCAGATCGTGACCANGNGCCCGGT  
ACGTCCCCCGATGCCGAACNCAATCCAATAAATNTTAAANGCCNCGAACCGCTTCAAAAATGGACCTGCA  
GACGATTGNGCTNNAGCGTACCCCAAGGGAAGGNCCGTAATAACCAACAGTAGAAAAACGACCTNGTGG  
CAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGC  
ACCCGGTCTGCGCATTAGAGCATGTGGACCCGNATGAACGACGAGACCCCGTGAATTCGGTAGCGCAGTA  
GACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGNGCTTCGATGTGCAGAAGAGATCATCNCTGTATTAGT  
NAAGTNATTGGTGCATTAATACACCGCCGCTTAAAGTCAGCGGACCAAAAGATAGGGACCAANGTAGTTTTG  
TACAGTTAATAATNACAACGCCAGAGCTGGATACGAAGCAACGCCNCTCGAAAATAGTGAGGTACGCGGN  
AGNTGTCTCAAGTCCNNGGGGGCGTCTTAGGAATCGCGGTGATNCCCTGTGAAGGGAGATGAGGAAGGA  
ACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCNNGCTCNNGCCGTNNGGAGAATACTGCAGATCNGAGG  
AAAACCCACGCGCTAATANNGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGN  
NGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCACGAGAGGGGACTTCTGCTCCGGTCCA  
GAGCAATGAATCCGAGGCGAGTGGGGTAAAAACGAGAGGGNNGACGGGTGGCGTTCCTGGGTAAACA  
AGGAAGGGAGCGGCTCGAGCGGTCCNTGAATCAGGTTGATGTCAAAGTACCCGNAGNCCAACCGNGGTGCG  
TGCTGGACATAGNTTAACACAGTGCCGCCAGGGTCCGTAGGTGCGTGACCTNNAGCGAGAAGATCGGAGG  
AATTTCCCGCAAGTGAATTAGGAGCGTTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAA  
GAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTANCAAGTATNACCGATAGGGGTACACCTA  
GGGACACGAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTGCGATGTAACCC  
GACTATACTAAGAACCGCTCTGGACTGACCNAGAAGGCGACGCAAAAGAAANNAGACCCCAAGTACTGGT  
GCCGNTTTTTGGGTCCATTAATGAAATACGGACGAATNCGATGCCGTTGTTACAGCAGGGGGGACCATC  
TTCCCTAGCTTGCTGCGNATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCC  
GGGAGGCCGCTNCAAGCGGTTGTTTCCAGCCNGTGAATANCTNACAGACGNATTGCGCACGCTTTGTNNCAT  
GCCGTCCGGCAACAAGTGGAGCAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGT  
AGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGG  
AATNGAAAGAAGGGAGTGGGGAGTANAGTNAGAAACCTATGTCATNNACGGGGTAGACCAAGCAAGCTCC  
CTAGGAAGCGANCCAAGTNCAAACAGCCCTAAGGGCCAAGCTGCNNGATTGCCGCTGCTAGGCGGAAGTGC

GGCGGAAGGTGTCTTAACGTTGNAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCG  
TACNNNTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGNAGTCGCGACAGAGGAACT  
GTCTGGACCGACAGTNTNGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACANATNNNCGG  
CCCGAGACCGAGGCTGTGTGTAANGAAAAGTATCAGCAGGCNANAATGAAGGCGCNGAATAGTGTACAG  
GCCAGAAAGCGAGTTNCANCGGGAGGGNATGNNNGCCAGAACATGGCNATTATGAGGGATCCGNTCTCAT  
TTGGGACCCTCCTCNTGTAATATTAGTGTGTGTGGCGAGACGGNCTNNTTCGGCACCAGAATTATTTGTTGTC  
GGACGTTAATCAGCCNCGTGAAGGCACGCNCTATCTAGGNGCTGGTAAGNNACTTTAGGGGGGAGCTGAGTA  
ACGGGGCCGACGTGAATGCAGCATCGGAGTCTNNTGGGACAATTCATGNGCGCTCNGGCTGCGCAATTNCG  
GCTAGGAGAACCNNCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCCACGGGGGAATCCNCGCC  
TGCGTGTGTGNGCGGGTGGTTCCNTCCCGAACCGCCACGTAGCAGAGCAAGAAGTTGCTTGTAACTGTC  
CACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCNTACAGCGAGAGCAGCGTAATAGAAGGGC  
GAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGC  
NTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCA  
AGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACGNATAAAACGGCAGCCTGCAAGNATTATGAGAT  
GGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCANNACCCGGTGAGGACTTTAATAGGCGGAGGTCCT  
GCCACTCACTTANCGCAGNATACGATTGGAGGGCGGAAATCTCCCGTTATAAAAATNCAGGCTNAANGAGTGA  
TCAGAGCGCAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGTTGGGNAACAGC  
NTCGCTACCCTGTATTCTGCCCCNTACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGAGGGGNAGGCA  
ATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTGATTTCTTTGC  
TTAGGCACTTCGTAGTGGNTACTGATCGAAACGAACGAACTGAACGTGGACAAGAGAGATATGCGGACGA  
GACGNGAAGCGCTTNNNGTTGCAAANNCGGCGAAAGGCGGTGCATNATAGTATATGGGGCGGGNNGAGNG  
AAAATGTAGCAGGNTTCTNNGGCTAGTTGCCNTTAGGCCGTGACTGTGATGAAATTGACNAAGCTCNNTGG  
GACAAATATGAGGGGAGGNCACCTGTCAGGTTGTTGAACGTGGTACCANAGACACGCAGACAAAGACACC  
CCATTGTGCGNACAGAGGTGTCCTCATTGTATGGTGCANACGCAGTGACTCTCAGGTTCCAATNGCTGNCA  
TGTATANNTCGNAAGAACGTAGNTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCACCAC  
GTTTGGTGCTGAGNTATCAAATGCTTCCACGACGATTGAGAAGTTTGGGAGGANCTCTTGGCATTTCANGCT  
NTCTTANGCCATACGAAGGATCTGNCCTGCATACGGATGGTGTCTANCAGCAATGTCCTAAGGCCANTNGCA  
TTAAAAAATATCTCGACCGGGTGGGCGGAGANANAGNGAGAAATGGAATACATTCGCGNNGGGGTAGAGN  
AGNGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATNGTCNCCATAAGCA  
GGNNNTNGTGGTGTAGNTAGCGAGGGNCCAAAGGAGGGACCCGGANTTATCATCTACCCCGCAGNNGG  
GAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAAT  
CTGATGTGCNAACAGACCCGTGACCNTGNCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTATCA  
GGAECTATGTCAGTATACAGGGGCNTNNGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCAAG  
GACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGCAAAGG  
GAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGNNTGGGACCTAAACTCAGTTAGCAGGAGGGGCGGA  
AGAGTCCATACCCTAGTANCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTAAAAGGTCATANCTATTTA  
GAATCCCTAGCCACANATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGNGAGTCC  
AGTAGTCTCCACCAGTCTANNGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACGG  
AGNCGCGGAGTGCTTTTGAANGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGCGA  
CGCCCCGAGGAACTATGTACGATAACAGCACCNNAACGCTGATTGGTAACGGAGCCTGTATTCTAGATG  
TAAAGGTCTGGAAGCTAGGGAANGNAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGA  
CGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGNGGCGACGCTTAGATGTAGNAGGCAGCCCTCCATTT  
GTGAGAACGCTGGGACCCATGTTAAGGGAAAGTCCAACAAGTTCCGCGCTTTCGAACTNNGCATAGGAGCAT  
ATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGNTACAAGGATCGTATGNNCCCTCAAGC  
CCAGTCTAATCGAAGGAATTAANATTCTATNACACAGTGCGTNCTNNACCCGGTGACGGAAGTTAAAGTCTCT

GCACTGGATGGCGGTGCGNNAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGNC  
TAGCCCTTACTCATGGCCCAACNGTTCNCCCGTACGAGGCTAATCGCACCCCTGCGCACCGNNNAAANNT  
TCCTCGGGCGGTTACCTANGNCTGACACTCGCGTANCAAGANNTTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTGCNGCATNCTGGCGCAAAAATCTGGCGCCGCGGTAGANGCAAAGCACCCTTTGTGTNNATGTGA  
CGAGGTNAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATNGTACCTGGTTAAACTACAGTCC  
CTAANGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGNNAAAAACCCAGGCAAAGAGAAACAACGNNNC  
GATCTNGTTNGAGCTCTTGCTATNCTGACANATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCNCCCGCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGANNACAGGTCC  
GAAGGACGAACAGCTGANAGTGCAAGCACTATTGGCCCCCAATNACCAATCTAGCTGGACTATACCATTGAT  
CGAAATNCAAGCAANGTTTCAGTTTCCGATAAAGCCCCAACGANGATGGCTTGCAAGGGAAAGGTCCGAG  
GCGGTCAAACGTCTCCNNTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGG  
TGGAGACAGTAGGCAATCAACGCGCTTACAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTT  
TCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATNAGAGCCGACAC  
TGGGTNTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGANNACAGCTATTTTTCATGG  
AGCCGCTCAATAGCGNGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGNCGCATA  
TTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCT  
ACTTCTATTAGGGTGGGNATCNCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTA  
CCCNGTCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTNNAGTGGTACCCAGATACTGAA  
TTGCCAGGTGCAANATCGAGANGAGGACGGCATNAGATGGAAAGGAGCTGAACGCGAACAGGGANGACTC  
GGACCGCAGGACATGCTGTGTGAGGAACGCATNGTCGNAGAACCCTGTNNGTTTTGCGGTACTANTTGNTC  
TAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGNCAGCAGAGTAGCTGCACATCTCCCTCCGG  
CATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGANAAGTGGTCACTCTAGCTGAAGATACCACGCA  
AGGAACCCCTCTCTCGAATTGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGA  
GCCGGGATAGAAAAANAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGANAATCTACTCCG  
ACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGC  
CTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAAATNCAA  
GAGGAGTGAGAGCAGGCCNACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACA  
GCAGACATTGTGCGCTCCGACAGGGCCGGTACGGGAAAGAGGGGGNCCNGCAGACNTTGGCCGNGNGACC  
AGCNNGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGCAA  
AATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCT  
TATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTNACCAAGGTTGNA  
TCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCNTCAGCATCAAAGCCTTA  
CGTGGGTGCCCGGTGCCCAAGGTGGNTTGTGTGCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCG  
GCTGTGGCCATAGCGACCAAGTAGATTGTAGNGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAA  
AGGCCGCCTAAATGTTATACACTAACANAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATT  
TGGCTTTCAAAGACGATACGTAGAGCTGNNGNGCNTTTTGTAAACCAAGTAACAACNAGAAAGCTACGCTGT  
ATCCGAANNNGACCTTACACGGTTCGGTNNGTAGCAGGAGGTTGCGAGGTCCTTGTGATGAGGCTGCGAACGA  
AGTAGACGGCTCACTATTCGATGGGTGCCGNGGGGCGCGCTCACACGGCGTGGNCTTTGGGCTGCTCTGGA  
CTAAGGGCAAAGGNAATGGACCCGTANGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCC  
CGCACTTACTGGCCGTACTATACGGNCGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACNGTAGGGAAA  
TCGCGAGGTGATAGTCAGTGCAGGAGGTGTNAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTC  
GGACAAAGAGCGGGCAGTGCATATCCGTCNCCTANCAAGGCGANGANACAAAGTGAGTGCCCCGAACCATGC  
GATCCTTNGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGANCCACG  
CAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGTCCCACGCATGG  
TATGTATTTTCATCGAGGTGACANACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCT

AGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGANNCATCGTGCTACCAGC  
CGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P40, Scotland\_4, VIM-2, 09.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGGTGCGTACGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGCTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCACTTTTGTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGTAACATGAACGCGTTTTCCCTAGACGTTTGTGTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCTGTCGTTGACTCAG  
AACATTTTTTCCGGCCCCCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT

GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAAGTCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCTGGCTGCTCTGTTTCCGGGGCTGC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCACACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTTCGAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTTCGTTCCCGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA AAC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC



CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAACTATTTTCATGTTTCGCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTTGGCCAGGGTTTTTTGTTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTCTCTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGGTCCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTNCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGGACTCCCTATTGTGTCGACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAAGCTTTGTCGACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG

ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCTAATCTGACGGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTACAGGGCTCCGTAC  
AATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTCGAACGGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTANGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCGAGTCGGGCCCCGATTACCAACGACGCAGACCAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGTCAAGATCGTCTGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCCTGACTATCGA  
CCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGNGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGGTTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA

AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAACGCCA  
CGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAATAA  
CCAACAGTAGAAAAACGACCTAGTGGAACCCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGCGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCTTTGGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGGG  
GTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCAAGCTGCCGATTGCCG  
CTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCCAGC  
TAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGTA  
GTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAGG  
CGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGGC  
GCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTATG  
AGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATCA  
GAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTTAG  
GGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTG  
CTGCGCAATTGCAGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCCACGG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTGC  
TTGTAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGCG  
TAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTG  
CATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAGG  
GTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACGAATAAAACGGCAGCCTGCAA  
GCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATAG  
GCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGGC  
TGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGTT  
GGGGAACAGCGTGCCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGAG  
GGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTGTA  
TTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAACTGAACGTGGACAAGAGAGATAT

GCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGGG  
TGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGCT  
CATTGGGACAAATATGAGGGGAGGGCACCTGTCAAGTTCGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGACCACGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCATCGCAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGNACCTCTAGCCCAATGGCGGTGTGGCGAGT  
CCANNAGTCTCCACAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGC  
GACGCCCCGGAGGAACTATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAACTATAACCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC

ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGCGTGACTIONATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTTGTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCACTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCTAACAAAGCGAGGAAACAAAGTGAAGTCCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTACAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P6, East of England\_6, IMP, 03.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGANNGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCNTTGTGNGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGG  
AACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTA  
AGACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCT  
CTCTCCGGGACTGACTCTGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGN  
TTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCCATAAACTCTCCAACGGNCCTTGAGTGAAC  
AGAGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTGCGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCA  
CCGCCCTACTCGGTGCGGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGA  
TCAGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCC  
GGTCAGATGGGTCAAGGGTTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTC  
CTNTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCNGCAGTCAGCTTTGTGTGAGTGAAGGAA  
TGTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGNAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTC  
TAAGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTGTGCGTGNAGACTGCCTTTGAGTGCAGCACT  
GCCTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATAGTGTCTTATGAGAGACCGACTAGTAT

GCCCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGG  
TTCTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACNAAGAATGGAACG  
GACACATGCATTACTTGTACAATAACGCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGT  
CATTGGAGAATGACACCCTACACTTCTACCACCTTAGTNATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAA  
ATGTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCT  
GCTCGTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCANT  
CCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGACGCTACCAACCGCCCAATTCTTTCCGTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCACT  
TGTTTTACCACTTACTCACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCNCTGCTGTNCTGGAT  
CTTTAGATCGCTTTATCNGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGC  
CCCACGTTGGTGCGAGTCGACNTNNTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACC  
AGCCGATCTGGATCTCCANTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTGTAAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGATTGAACTCCGATGCCATAATTCCGGCCCTTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCAACATTCATCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGTTGCTCCTGCTCACAAGCATTGCACCNGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGT  
ATCCTCGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTNTACATCGC  
CACGAGAGGCCGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCGCGTTTGCCT  
TTGCCGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCCGTCCGTGAC  
TCACGAACATTTTTNGGCCCTCTTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCGATTCTGGGTGCGTTTGT  
AGTGTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGC  
CATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCG  
TGACGATCCATATAATAGCGCTTCTCTGTCGATGNTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGA  
GGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCT  
CCTCCNCGCAGGTAATCTTTTGGTAGTAATGGAGTGCCGGTGCACATTATTAGCACGCTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTAGTAGCCCCNAGC  
TCCCTGAGACGGCGAGACCNGTGAGGCAGGCCACCGCTTACGTTAGACCACGGCCGAGCGCTCCAAAGA  
GTNAGCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTANGATTGTTAAGATATCC  
ATTACGCGCTGTNNGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGA  
CCACCGACCTACCGCACAGGGGACTNNTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTT  
TTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCTCCATACCGCCAAATCGTCATTTAGCTTTGCT  
AACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTCCCTCTGAGCCCCTATCCTTTCCGCATACAAA  
CAGATTAGTACCAATTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCA  
TCCTGTTTTCGGTTCCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTNATCG  
GGATGGGTCTTGCCTTCGTCGGATAGCGTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTAATGA  
TGGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGT  
TTGGTTTGGGTCTCCTTCCATATCATTATCTGGCGTCTACGGTCTCGATGCNAGGCCCACTGCATCCACTATC  
GCTTTTACGAGAGTAATCATTCTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCNNGCTGCTCTCGTTTCCG  
GGGCTATCCCTAATAGATGTAATGCTATCAGAGTCTTNTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGA  
TGTTAGGTTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTT  
CGGTGGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGC  
GCGGATTTACCCTTGGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGG  
GTGCGACAATACCGAAGCCTTGGAGCTAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGC

ATCGTTCGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCT  
TGCGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACT  
CCGGCGCTCATTGCGGCGTGGCCCTATGGNTTCGACGCCGCTACTTAANAGTAGGTCAATGTCTGATTTGTA  
CCCAACGCCCTAGCCTGCCCTTTGTANCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
ACTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGT  
GTATCCTTAATCGTCACGCCGATGGTCCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCAC  
TGACATCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCNGATTTGCTCCCTACGG  
TAACGCGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGNGGCTCCTTCCGTAGTCTCACGACGANACC  
ATATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTNNTTGTAAAGCTCAATGAAAG  
GCATTCTGTGATTCTAACCAGGTGNCGGGACGACTGTACAGAGTGTATGGCCCCGGCCTTACTAGCCTGCAT  
AGCTAGTATCTGGGGTGTGAGCAGCGCCTCGTCCCGGTTTTTCNTGTTTCACTGTGCCACTGACGTTTTACG  
ACGGTTGTGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTG  
CGAGCGCTCGGCCGACCAGGGCCACCCTCGCGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTC  
CATTGACCCTTGATTAACCAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTT  
GCTCAGCGATNCTATTCTACGTTGCTCCCGGGTGTGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATC  
CGTTATGTCGAAATCCCATTAAATACACGTAACACTACTAGCTTACTGAGTTTCGNCCGGCGGCTCACGACGCTC  
ACCCCCCGCGTCCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACT  
ATGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCNGCACGGATCTTAGCTGTGCC  
TTCTCTTCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGG  
TTTCTTACTCCCCTAGTGGGCGTATCGCGACCNCTCAANCGGTATCCTCGGAGCCACGTATGACCGGGTCAA  
GATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATT  
ACCATTGCCCTTATTGTGACGGGGAGATCAAATATGCGGGTNCCTTACGCCGCTTCTGTTGTCGCCAGAC  
TAGGTTAGGAACCTATNCAGTACCTCTCCGTAACCTCGTGGTGTGCGCTTCCCTGCCAACTATTGTAATAGCG  
AGCNNATTAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGNTCGACACCGGCCGGGGGA  
CTTTATACGCGCCCCGCTGGGCCGNCCCCGAGAGNNGATAGCTNCTATAACCCTGCAGCCACGCGGNN  
GTCACTACGCTCCCTTTCAGACCCTCTCGTNNNTGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACG  
TACCTNNCANNACCTAAGGCCATANCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTC  
GGGGATTCCCCGCACCGCCACNTGTGGGATCCACNGAAACGTAGGCGTGTCTGCGCGCNTTGGCCCACTGG  
ACTTGAGTCACGACCTCGATCGGTCAAGCGAGGGNTACCCCTGCACATTTTCTCTGACCCACACAGGGGNAG  
TCCTCCTCNGTACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGC  
CCAGCACAGTGGCTAACCCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCA  
TCATGTCCTCTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTNCATCACGGCCA  
CCCATCGAGTGTGACCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACC  
AATTTTGTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAG  
ACGGGTAANAATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCCAAACCGGTTTTNNGATGACT  
CGTTTGACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGNGGAGTCNCCTATGCTACATNNNNGGTAGA  
TAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCA  
GCTGGGATNAGTCGTGCCCGTGAGGCTTNTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATC  
CAGATCATTACCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTNCTCCTATTTGGTGATACGGT  
CCGCAGTCTACTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCG  
CCTGTGTGATGTTGGCGCTCTGTTTTAGTAGCTTCATATCGNCGTTCAGCGGGCACTACTAATGGTACCAGTCC  
CCGCATCTAGCTGGGTAGTGTACTCGCNATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAG  
CTTTCTAATTCTTTTTGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGT  
TATTTGACTCCTGAGCAGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGNGCGGCGCT  
AGTGGCTTACTATTGCCGTTGGTCNCGACGNCGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTG

ATGGTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAA  
CAATNNGTTCGCTCTGCTCCTCTNGTCTGCNTCNGTGGATCCTTANGCANAGTATAAACGGCTGACTCAAG  
GTAGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCNNTAACTGTTCCGAACA  
TCCAATGATGCTTTTCAAGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACNGCCTATCGCTCGAT  
GACTCGCAGTGGACGTGCCCTNGCNCACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGNTACCTTAC  
TCACNACATNACCATGAGGATCTGTTATTCGGGCCGGTCTGTNAGGCTGTTGGGAGTGCCTGATATCTGTTA  
GCAATACATGGGGAGAATCTTTGGTACTTTACGTATTCTGCNGTTAGAAATTTTACAGCGGTTTCATAGGATT  
GACCGCTATTAAGTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCNCTGATTGT  
GGCTCGGGAACAGGTCAAGCTNTAAGGTAGTTGGCTAAGAATTGGATNGAGGTTCCGCGCTGNTGCTCTTCGC  
CGAGCTAAAGNNACCGGGAGCGGNAAAATATTGCTTTGTATNTGACTGCGGGTGTATGTCGCCCATGGGGCG  
NNTNGTGCAGCTCTAGAATAACANNGCCNACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGNAGGANGAC  
CTCCATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCA  
GGCGTTGGCACGTCACTCACCCCGTCCGGCTCTACGGCGATCGTCTACTGCCAGGTGNCGGTACCGGCGG  
GGACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGT  
TATTTACCATTTGTCCAATCACATTCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGA  
TTACGTGTACGTGCCCCCTCGCCCATGTGCGATNTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTA  
GANCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCTCCCTCAGTCACCCTTCTAG  
TCACTGAGTACGATATTTGGATAGTTCATAGGCATGTATNACCTACGCACCCGAGTTAGCAACTCCTCAACCTT  
CTCCCCGTTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGCAGCAT  
ACGATAATCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTT  
GAGCGCGCTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTG  
GGGGCANCAGGGATTGCACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGAC  
ATGGGANCGAAGAGCGATAGAAGTGAAGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAG  
GCNNTGTCACTGGTGAACGCTTCGGGTGNCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTT  
GCGCTGGCCGCCGGCGGTTTTTGCGCAATTCTACGGGACGCACCGGCGTGTGTGACCGTTTGACCCCATGATGG  
GGAAAGCACGGCCTAGCCTGACGGATCCAGTCTAACCAGATTTTTAGTTCGCAAGTGAAAGTGCCTGT  
GAGCACTTCTCTCTGAGTAGAGCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCAT  
ACGTTCCCGATATTGAGCGCTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATC  
CAGGGTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGT  
GGCTAGTAAAGTGGCCNGCGAACGTCAAGTGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGG  
CTTCTCAGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGC  
TCCATTTGGCANTGGGTGGTACGAAACCGCACTNNNNAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGC  
AANAGACAGTTCAGCACATGACATTCCGCCACAAGCTCTGCCACNCGCNGGTAAAGTAGGGGGACAGCC  
GAGAAAGACCAGGTGCGAGTAGGTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGT  
TGGGGATCTTTCCTATACTCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCAC  
GTTCTGCCTCGCTCCGTAATATGAACAGCCGGCGTGTCTCCGTAAAGCTACACAAAAATCTATAGGGT  
ATTCCGCGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGNCGTCTGTCTACTATCCTGTACTCAACTC  
AGCCGAAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAAT  
CACCGTATGGGGTCAAGACCGGATAGTGGCGCCNACTGAAGCCCCAAGGTGCTTTGATANTTCCCGGACGC  
GGGTATCAACAGCCGACGGTCTTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTG  
GTCTAAAAGGGTCCGCAACCGACGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATNGCCATT  
CAATGGGCTCTCTGTTTCAAGGCTCCGTACAATTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGC  
GCGGAGCCAGCGGCCGACGACGGATCGGTGTGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTA  
AGGGGGTTCCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTNTAGTGCTAGGTCCCA  
CGCCCCAAGGCTCTCGGCGCAGTGTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATNAGCAGAAA



GGGCGACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTANATCTCGCTCG  
GGGGGCAAGTCGGATGAGGTTGCCCCGAGACCAACGCCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGA  
ATCTGTACCGCTATTCTGGATAGGAAGGAAGTACGAACTAGACGNNCCGTGTCAAAGACAGCGACAGACA  
GGAGCTGGATGATCAGTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAG  
GCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGC  
GTCGTCTATACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTA  
GGGGGCTAGGCCTTCGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCC  
TAGTACGTGGGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCCGTAT  
TACCAACGACGCAGACCAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGANGATCGTCGTAACCCC  
TGTCAGTGCCATAACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTGC  
TGTACGATTACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAA  
AGCACGCGTGCCTNCGCCCTGACTATCGACCCGCGTGTACCAAGNAAGCATCCCGACAAATCATGTCCAGTA  
TACCCTCCTTTGTTCTCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTC  
GAACCCAGNCGACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCG  
ACCTACTTGCCCGATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGA  
CCACGCTGCGAGTACTACCGCTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACG  
AACGTTCTACGAAAGAGTCCNCGTCTAAGNCCTTCAAGTTGACCGGTCAAAGGTCCGGCNGTTGGCTACTAN  
AGGACCATGCAAGGCGATCGGAGTNCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATA  
GCAGGAGCTTAACNTCCCGATTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTNCGGTTA  
CATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACA  
GTGACCGTACCGTCATCAATAATCCACCAGCTGGAACAGGGGTGGCAAATTACGAACATCAGTGTAAAGGAG  
CCTAATTAAGGCGAACGCAGGTATCGTTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGAT  
GTCAGACCCCGAGGTGTAGCGAGCGAGCGGGAATCGGATCGNATGAAAAAGCTGTGCATCCGGAAACACCG  
TCTTAAGAATCGAAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGC  
GGTCCCAAGTAGCCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGA  
TNTGGCTGTTACAGCCTGGCCGTATACCTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATG  
CCGAACCCAATCCAATAAATATTTAACGCCACGAANCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTG  
AGCGTACCCCAAGGNAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATC  
AATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCACCAATTGCCTTCGNGAGCGCCGACCCGGTCTCTGCGC  
ATTAGAGCATGTGGACCNNAATGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTTCCGGTGG  
CGCCATCTGTCCGACCANAAGGCGCTTCGATGTGCAGANGAGATCATCCCTGTATTANTGAAGTNATTGGTC  
GATTAATACACCGCGCTTTAAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATG  
ACAACGCCAGAGCTGGATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGNTGTCTCAAGTCC  
GGGGGGCGTCTTAGGAATCGCGGGTGTATNCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTA  
TCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCNGAGGAAAACCCACGCGCTAA  
TACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAA  
TCGGCCCTATCTACCGATGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAG  
GCGAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTC  
GAGCGGTCCATGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAA  
CACAGTGCCGCCAGGNGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGGCAAGTGA  
ATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTC  
AAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTT  
GGCGAGGACCTTGTGTTCACGGTGGTGGCCAGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCG  
CTCTGGACTGACCAAGAAGGCGACGCAAAGAAACCAGACCCCCAGTACTGGTGCCGNTTTTTGGGGTCCA  
TTAATGAAATACGGACGAATCCGATGCCGTTGTTACAGCANGGGGGCACCATCTTCCCTAGCTTGCTGGCC

ANAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGC  
GCGTTCGTTTCAGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGG  
AGCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGAC  
GAGAATATGGGGGTAGGCAAACNTCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGG  
GGAGTATAGTAAGAAACNTATGTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTNN  
AAACAGCCCTAAGGGCCAAGCTGCCGGATTGCCGCTGCTAGGCGTAAGTGCGGCGGAAGGTGTCTTAACGTT  
GCAAGGGACCTGAGCGAGGGCCAATACCCCAGCTAGAGGTGCAAAGCGCGTACGGNTCAGTGAATCAATA  
CCCCTAAGACCAATTTTAAAAGCCATTATTTGGTAGTCGCGACAGAGAACTGTCTGGACCGACAGNGTGGC  
GAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGT  
AACGAAAAGTATCAGCAGGCAAGAAATGAAGGCGCAGANTAGTGTTACAGGCCAGAAANCGAGTTACACCG  
GGAGGNNATGGAGCCCAGANCNTGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATAT  
NAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTNGTGAAG  
GCACGCGCTANCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCN  
TCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTNCGGCTANGAGAACCCTCGTGGACAAA  
CGAGGGTACAACGCCCGCTATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCC  
ATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGA  
CCAGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTNCGTC  
TGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTC  
GCGACGCATTTAGATTGCTGCCAAGAGTATGNNGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCAA  
CGCCGAACCTGACGNATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCT  
GCGGCCAGGCATTACCCGGTGAGGACTTTAATAGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATT  
GGAGGGCGGAAATCTCCGTTATAAAATCCAGGCTGAANGAGTGATCAGAGCGCGAACAAACGACTCAGGA  
TTCCGGCAACCGTAATCCCGACAGCGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACG  
CTTGTGGGGATCGGCCAAGTACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAG  
AAAGATTCTGCACCAGGGCTTGCCTAACATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTACTGATTG  
AAACGAACGAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGNGAAGCGCTTNNNGTTGCAAATTC  
GGCGAAAGGCGGTTCATGATAGTATATGGGGCGGGNTGAGGGAAAATGTAGCAGGCTTCTCTGGGNTAGTTG  
CCCTTAGGCCGTGACTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGG  
TTCGTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTAT  
GGTGCATACGCAGTACTCTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAA  
ACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCAGACCGGTTGGTGTGAGGTATCAAATGCTTCCACGGA  
CGATNCAGAAGTTTGGGAGGAGCTCTTGGCATTTCNAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATA  
CGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGNNGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAA  
AGAGTGAGAAATGGAATACATTCGCGGGGGGTAGAGCAGCGAGNAAAGGTGTCATAGTTTAGGCANACGC  
AAGGACCACNNGGGCATGGAAGATTGTCNCCATAAGCAGGGAACNTGTGGTGTAGGTAGCGAGGGCCCAA  
AGGAGGGACCCGGAGTTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACA  
CACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGG  
GTTGCACGAAGGAAGACTGGGAGAAGTACGCTATCAGGAACTATGTCAGTATACAGNNGCNTGGGCCTAA  
GAACGAGCCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGT  
GAGCCCATGAGTAGCTCCGTCATAACCCTTCGAAAGGGAGGAATTAGAAGGAATCAGGTANTATGCCTTGA  
TGTATGGGACCTAACTCNGTTAGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGT  
GGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATTTAGAATCCCTAGCCACANNTCTCGTCTTGCCGACTCAT  
CTGGCACCTCTAGCCCAATGGCGGTNNGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGGCAA  
TGCCGAGGCACGTTGGGAGNAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTNAGAACAAAAGG  
ATATGTATGCCACTCCCCGNTGAGAGCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCC

GAACGCCTGATTGGTAACGGAGCCCGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGC  
ANGTAGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCGAGCGGTCTAGTTGTGACGGG  
GAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTC  
CAACAAGTTCCGCGCTTTGCAACNGGGCATAGGAGCATATGCCCAAGTCAANGTCTCTGCCGACATGAGACC  
GGGGAAGTGAAGATACAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACA  
CAGTGCGNGCTTAACCGGTGACGNAAGTTAAAGTCTNTGNACTGGATGGCGGTGCGCTAAGCTGGAATAG  
GCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTA  
CGAGGCTAATCGCACCCCTGCGCANCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGNA  
ACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGC  
CGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATC  
AAAAAAGGTGATGGTACCTGGTTAAACTACAGTCCCTAATGCTTCTGCTCNCAGCATTGTTGAGGGTTGTA  
TGGTAAAAACCCAGGCAAAGAGAAAACAACGTAACGATCTGGTTGGAGCTCTGCTATACTGACAAATGACTCA  
CCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCA  
CCCAGATTCTAAGTGGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGANAGTAAAAGCACTATTGGCCC  
CCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCC  
AACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCNTTCGTGGTAAACTGTACCCAG  
GATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGNAATCAACGCGCTTCAGATAACGGTC  
TGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCNGGGAA  
GTCGACTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTG  
GCCATTTAAGAACTGATTACGGCTATCTTTCATGAAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTG  
GATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATNCTCAGCTGGTAGAGC  
GGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCG  
GGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAAGCGACAGACCCTCAGACAACGTCTAACC  
ACGACCCCAGTNNAGTGGTACCCAGATACTGAATTGCCAGGTCGANNATCGAGAGGAGGACGGCATAAGAT  
GGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTC  
GAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAG  
TGNCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGA  
GAAGTGGTCACTCTAGCTGAAGATAACACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGC  
GGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCA  
GGGGTGGGACGGAACGAAAAATCTACTCCGACGGGGGATCCCTCAAATCCGCACGCAGGTTACCCCCCG  
CGCGCCGCACTTTTGTATTACGATCTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGA  
GGTCAGTTCATCTCCTCCCGCTTGTAAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAAT  
GGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGACAGGCGCGGTACGGGAAAGAG  
GGGACCAGCAGACNTTGGCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTNGGAGGATGATGAC  
AGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGG  
GTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGC  
CTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGG  
TAAGCGGTAATNCGTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCGCNAAGGTNNGTTGATGTGTCTGG  
GACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAAACTC  
GGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATG  
TATTAGCACTAGTNCTGAGGAGGCAGCAATTTGGCTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTT  
AACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATANGACCTTACACNGTCCGGTGTGTAGCAGGAGGTT  
GCGAGGTCTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTC  
ACAACGGCGTGGNCTTTGGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGG  
TGCTCTTAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCC

CTTCTACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAG  
GTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCAACAAGGC  
GANGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACG  
TCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAAATT  
AAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGT  
TCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACGTGGATGTACACAATAGCGAATGGTGGGTGCG  
GTCCTTCAGGCGAAGCATCGTGCTACCAGCCGCGATAAGATACCCGCAAAGAGTGCATAAAG

>P26, Wales\_1, VIM-2, 11.10

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGCGCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACATGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGCGAGGGTCTTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGTGGAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATNTCAACTTGT  
TTTACCCTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTT  
TAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCC  
ACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGC  
CGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACC  
TAACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTA  
GGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACT  
ATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCT  
CGTACCACATTCATCCTCTCTTTCTTAAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCA  
GCCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCC  
TCGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACG  
AGAGGCCGGTGTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGCTTTGCCTTGGC

GGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCTCGTCCGTGACTCAC  
GAACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCGGTTTGTAGTG  
TTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCGGAGGAGT  
GGCCTTGACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACAGATANGCTATTTGTGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCACTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAAACCCTCAGTGGTAGTGGTCCGCAATCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT

TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTCCCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGNCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTC  
CCCTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTACCTTACCCACCT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGG  
GAGAAGAACTATTTTCATGTTTCGCCGTACCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACACTGAAAAGTCGTGTGCGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTTTTTTGTTCTGACCTCCATCCAGATCATTACGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGC  
AGCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGCTCCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTGCGCCTGGTGCTCTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGCCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTACCATTGTCCAATCATAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCC  
ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGCTCCCTCAGTCAACCCTTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTTA  
CTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC

GGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCCTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGCGA  
CTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGGTAGGGGGCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGCCCCGATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGTTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTCACTGGGAACCAGAAAGCACGCGTTCGTTCCGCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CACTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC

TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAATTCGGTAGCGCAGTNGACTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGAT  
GTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGAC  
CAAAAGATAGGGACCAAAGTAGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCC  
TCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGATG  
CCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCG  
TAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGACT  
AATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCGAC  
GGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTG  
GGACGGGTGGCGTTCCTGGGTAACAAGGAAGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
GTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGT  
GACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACC  
GCGAAGAGGGGTANCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAAG  
TATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCC  
AGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGA  
AACCAGACCCCAAGTACTGGTGCCTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCCG  
TTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTA  
CACCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACCTGCAGACGG  
ATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAGCGGAGCAAACCGTAGGCGAGGAACAAAGTTAGCT  
ATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCCAAACATCGGATGG  
GAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACG  
GGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTG  
CCGCTGCTAGGCGAAGTGCGGCGGAAGGTGTCTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
AGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTG  
GTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAA  
GGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAG  
GCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGGAATGGAGCCCAGAACATGGCTATTA  
TGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGCAT  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCAGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTAAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTTAAAGTGTTCACGCGCAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAATA



GGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCTGCTACCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTAAGTATCGAAACGAACGAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGCGGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATGGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAATGGC  
TGACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTTCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATAAGGATGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTA  
GAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAAAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCANGAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTTCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACCATGTATGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCATCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTCCGCAATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCTTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCGCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTTTAAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGTCCGAGGCGGTC  
CAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGATATTCTGAA

GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAGGAGCTGAACCGGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTA  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCCGCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P10, London\_6, VIM-2, 09.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAACATCTCAGCGTCTGCACGCGCCGGAGCCCC

NTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCGCTCCGTGACTCACG  
AACATTTTTTCCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCCGGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTTGTAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC

CCTAATAGATGTA CTG CATCAGAGTGCTTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGCGGTGCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTGGATTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCCGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGTTCCCGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCTGGGCCCTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGA ACTATTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTTGGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCTGTGCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTGC CGGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC

TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTG C C A T A A C C C C T G T G C G A C A T G A G C A C C C A T G C C A A A G A G T G C T A A A G C T T T C T A A T T C T C T T T T C G  
C T G G A A G A C C A T A C G A G C T C C A T C G G C G T G G C T G G C A T G C C C C A G C G G C G T G T T A T T T G T A C T C C T G A G C A  
G C T G T A G A A G G T G T C G G T G T G A T G A A G A A C C C G T C C C G T G G A T T G G G C G G C G T A G T G G C T T A C T A T T G C C G  
T T G G T C A C G A C G A C G G C A G G T C C T G G C C C G G C C A T C G C T G G A G C C C C G C T G A T G G T C C A T C C G C G T G C T  
C A T G C C T T T C A T A T T A G T C G A G T C A G G C T C T A C T G G C A G C G A T T T C T T T A C T A C A A C A A T C C G T T C C G C T C T G C  
T C C T C T A G T C T G C G T C T G T G G A T C C T T A T G C A C A G T A T A A A C G G C T G A C T C A A G G T A G C A T A T C G A A T A T C C C  
T G C C T T A G C A C A A T T C G T A G C A T C A T G A C T T C T A C C C T C A T T A A C T G T T C C G A A C A T C C A A T G A T G C T T T C A G G T  
C A C T A C G C G C T C C G C G A G C A G T C A A G C G A C C T A A T T T A C T G C C T A T C G C T C G A T G A C A C T C G C A G T G G A C G T G  
C C C T T G C G C A C G C C A G C G T A C A A A T C A A C C G G C G C T T A T T C C G T G C T A C T T A C T C A C A A C A T C A C C A T G A G G A  
T C T G T T A T T C G G G C C G G T C C T G T T A G G C T G T T G G G A G T G C G T G A T A T C T G T T A G C A A T A C A T G G G G A G A A T C T  
T T G G T A C T T T A C G T A T T C C T G C T G T T A G A A A T T T T A C A G C G G T T C A T A G G A T T G A C C G C T A T T A A G C T T C C T T C A  
T A C C A C C T C T A C C C T C A T A T T G A T C T C C C C A G A T G A T T T C C C G C T G A T T G T A G C T C G G G A A C A G G T C A A G C T  
G T G G G G T A G T T G G C T A A G A A T T G G A T G G A G G T T C G G C C T G G T G C T C T T C G C C G A G C T A A A G A A A C C G G G A G  
C G G C A A A A T A T T G C T T T G T A T G T G A C T G C G G G T G A T G T C G C C C A T G G G G C G G C T A G T C G A C T C C T A G A A T A A C  
A C G G C C G A C G T T T T G G T G A A C C G T T A A G G C G G G T C C T G T G G A G G A A G A C C T C C A T T A C A A C A A C G G T C C C G  
G A A A C C T T G T G G T A G T C G G G A G A A G C A T G C G G G C T G G A C C G G C C T A C C A A G C G T T G G C A C G T C A C C T C A C C C  
C G G T C G G C G T C T A C G G C G A T C G T C T A C T G C C A G G T G C C G G T A C C G G C G G G A C A C T C T G C C G A G T T G C T A A A  
C T G C C C T C C G G T G C A A G G G T T T T G G T G C T A C A C T C T G T G T A C C A G G G G G T A T T T A C C A T T T G T C C A A T C A C A T  
T C C G C T G G C C C C C A T C T A T C G G C A G T T G G T C C C A G G G G C C T C C C A T G A T T A C G T G T A C G T G C C C C C T C G C C C  
A T G T G C G A T T T G G C T C C A C C G C T G T G G G C C A T C T T C T A T A T C C A G C C T A G A C C C G A A C A C C T A C A A A G A A G G  
A A C C A C C G C A A G T T G C G T G A C G G T C G G T G C C C T C A G T C A C C C T T C T A G T C A C T G A G T A C G A T A T T T G G A T A  
G T T C A T A G G C A T G T A T A A C C T A C G C A C C C G A G T T A G C A A C T C C T C A A C C T T C T C C C C G C T T T T T G G G C T C T A G A T  
T T G G G G G C T C C C C G T T C T G C G C G C G T A T A G G C C A G G A A G T T T G C A G C A T A C G A T A A T C T T T T C A A G G C T T T T T A  
C T T G G A C T C C C T A T T G T G T C A C T G C G G G C C C T T C T A T G G C T C C G T C C T G A G C G C G C T G T C T A C A T C C A T G G C  
G G T C C C T A T A C C T T A G T C G G A T C C T G T T C G T G G C C T A T A C A G A A A G C T G G G G G C A C C A G G G A T T G C A C G G C A  
G C G C G A G G T G A T G T C C A G G G C A T G G A G A T T A T C C C T A T C A G T G G G A C A T G G G A T C G A A G A G C G A T A G A A C  
T G A G C G C G A A T T A C A A T A C G T C T C T A C G T G T A C T A A C C T A T A A G T C A G G C T T T G T C A C T G G T G A A C G C T T C G G  
G T G C C G C G A G G A G T G T A G C G A G A T C G C A T C A G G C C T G T C C C T A C G T T G C G C T G G C C G C C G C G G T T T T T G C G  
C A A T T C T A C G G G A C G C A C C G G C G T T G T G A C C G T T T G A C C C A T G A T G G G G A A A G C A C G G C C T A G C C T G A C G G  
A T C C A G T C G T C T A A C C G G A T T T T A G T T C G C A A G T G G A A A G T G C C C C G T G A G C A C T T C T C C T G A G T A G A G C C  
C A T C A G T C C G A T C A C G T G C C G A T C T G A A T C T T G G C T A G A C G C G C C C A T A C G T T C C C G A T A T T G A G C G C T T T A A T  
C T A T T C C A C C T T T G C C G T G C A T G C T G T C C A T A T G C C A C C A A A C G C A T C C A G G G T T C T G C G C T G C G A A G A G T T G  
A T T T A T G T C T G C C G T T C C T A T T C T A T C C A A T T T G C G T T C A G C G T G C T G G C T A G T A A A G T G C C T G C G A A C G T C  
A G A T G G G C C G G C C A C T G C A A C T A A T G T C C T A A T C C T G A C G G T T G G G C T T C T A G A G C C C A A T G C A C A G T G A G C  
C G T G T G T A G A G G G A A G C C C G G G A G G G A C G C G T G T C C A C G T G C T C A T T T G G C A T T G G G T G G T A C G A A A C  
C G C A C T C G G C A A G C G C A G C T C T C T T G T T A C G G C T G G G A A G G T T G C A A G A G A C A G T T C C A G C A C A T G A C A T T C C  
G C C A C A A G C T C T G C C A C T C G C G T G G T A A A G T A G G G G G A C A G C C G A G A A A G A C C A G G T G C G A G T A G G T C C C G  
G T T C G A A T A T G T T A A C T T T G G A G C A T G C T T T A T T C G C A C T C G G G T T G G G G A T C T T T C T A T A C T C A A T C T G A A T C  
T T C T C T A A G C G A G G A T T A C A G C G C T A G T G T A T A A T C A C C T C C A C G T T C T G C C T C G C T C C G T A C T C G T A A T A T G A  
A C A G C C G G C G T G C G C C G T A A A G C T A C A C A A A A T C T A T A G G G T A T T C G C N G A G C A A G T A A C G A C A G A A C G A A  
T A C C G G C G A G G C T A G T C G T C T G T C T A C T A T C C T G T A C T C A A C T C A G C C G A A G A C G A C G G A C A G G G T C C C G G G C  
G G G A G A T G G C G T G C A A T C C T C G T A C C G A G A A G T C G G A A G A A T C A C C G T A T G G G G T C A G A A C G C C G A T A G T G  
G C G C C C A C T G A A G C C C C A A G G T G C T T T G A T A A T T C C C G G A C G C G G G T A T C A A C A G C C G A C G G G T C C T T T T G A G  
T C C G C C C G C G A C C C G T G G C G A G G A T C C G A A T T T G T C T C T G G T C T A A A A G G G T C G G C A A C C G A C G G A C T G

ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGCGA  
CTGTGTCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTA CTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCCGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAAGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGAACCCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAATTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACAGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG

CGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ATCCTGCCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGGCCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGCAT  
CAGAATATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGAACAACGAGGGTACAACGCCGCCGTATGAGAGCCACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCNGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAAT  
TGGGGAACAGCGTTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG

GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCAT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA



AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGTATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>S3, London\_17, VIM, 03.09

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCNCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACNGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTCGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTTAAACATCTCAGCGTCTGTCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCACTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA

TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTTCTGCTCACAAGCATTGACCCGCGGACGACTGTCTGCCTGTTTTACCCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTACGGTAATTTTTGTGCCGACTGGTGC GCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGCCCCCTCTTTCTGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCNCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCANTGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGC GCAATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGTCCCTACTTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCCCTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCGGGATAGCGTAAATTTCTTGAGGCCCGAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCCCTTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTCCGGGGCTGTC  
CCTAATAGATGTAATGATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCCTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGGATGGTCTGTAAAATATCGGGACCACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGTTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC GAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAAAAACCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGAA

ATCCCCATTAATACACGTAACACTACTNGNTTACTGAGTTTCGACCGGCGGCTCACGACGTTACACCCCCGCCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTCCAGCGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTAATCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGTCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGACAATTTCGTAGCATCATGACTTCTACCCTCATAACTGTTCCGAACATCCAATGATGCTTTTCAGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCCGGCCGGTCTATTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGTTNCTCTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTGCGGCTTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGAAGGGTTTTGGTGCTACTCTGTGTACCAGGGGGTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC

ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCAGTGCAGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCANGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATANAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTNCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTATTTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGCCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTNCCCAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTNAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGAC  
TGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTAAGGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGGCCGTATTACCAACGACGACAGCCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTGTGTACGATTACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCCTGACTATCGA  
CCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAC  
GAGACCGGGCCCTACAGTTGTGCGTGAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGNGGC

CCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAG  
GCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCT  
TCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCATTCAAAGA  
ACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAA  
AAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAG  
CTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCC  
TATCGCACATGGCCGACTTCACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGG  
GAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATNNCAAATTGAGGGCGCTGACA  
GCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAAT  
AGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTT  
AAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATTTAACGCC  
ACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATA  
ACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCC  
GCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACG  
AGACCCCGTGAAGTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGAT  
GTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGAC  
CAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCC  
TCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCGTCTTAGGAATCGCGGGTGATG  
CCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCG  
TAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACT  
AATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAC  
GGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTG  
GGACGGGTGGCGTTCCTGGGTAACAAGGAAGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
GTACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGT  
GACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACC  
GCGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAG  
TATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCC  
AGCTGAGGTTGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGA  
AACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCCG  
TTACAGCAGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTA  
CACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACCTGCAGACGG  
ATTGCGCACGCTTTGTATCATGCCGTGCGCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCT  
ATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGG  
GAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACG  
GGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATTG  
CCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
AGCTAGAGGTGCAAAGCGCGTACGGTTACAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTG  
GTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAA  
GGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAG  
GCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTA  
TGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCA  
CCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAAACTT  
TAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTC  
GTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGGTATGAGAGCCCAC  
GGGGGAATCCTCGCTGCGTGTGTGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTT

GCTTGTAACGACTTGCACCGATGAGGAGAGTTC AATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAG  
CGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGG  
TGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGA  
GGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGC  
AAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATTCGGGCAACCGTAATCCCGACAGCGGCGTCA  
GTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAAGTACTATCATGC  
GAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
TGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTA CTGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGA  
TATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGT CATGATAGTATATGGGGCG  
GGGTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAA  
GCTCNTTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACA  
AAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATG  
GCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCAAGT  
GCGACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATT CAGAAGTTTGGGAGGAGCTCTTGGCAT  
TTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCC  
AGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGG  
TAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCNCCA  
TAAGCAGGGAACCTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCA  
GGGGGGAAAAGTTTCCAGAATCAAGNTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTG  
CTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACG  
CTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGC  
ATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCTTCGC  
AAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGG  
GCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCT  
ATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGA  
GTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCAC  
ACGGAGCCCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCCCTG  
GCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTA  
GATGTAAAGGTCTGGAAGCTAGGGAAGGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAG  
GAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCC  
ATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGA  
GCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTC  
AAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTC  
CTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCC  
GTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATT  
TTCCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGA  
ATAAGTTTTCGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCTTTGTGTTAATGTGAC  
GAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCC  
TAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGAT  
CTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCCCTAA  
GAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAA  
GGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGC  
AAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAAGTCCGAGGCGG

TCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGA  
GACAGTAGNCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTTCG  
AAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGG  
GTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTTCATGGAGC  
CGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCT  
GAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTT  
CTATTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCACTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTAAGTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTATTACGATCTTTCTGCCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGC  
AACAGGTCAAAGACGTCTACGGGCNCCCATGGGTAAGCGGTAATNCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGNNCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCACTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGCGGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCGTTAAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P62, London\_9, VIM, 01.14

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGNATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG

ACTGTAGCTGGCTCTACCCGACTATCTATTGCTGCGCTTACCGCCCCCAGTTTTGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCGTCTATTGGGCGCTTGCCCACC  
GCCCTACTCGGTNGCCGGCTGGAAAGCTATATAGGTTGCTCTCCGCACCACTGGCGCCCCGCCGANGATC  
AGACGCTGCTNCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCGCAAGCAGTCAGCNTTGTGTGAGTGAAGGAATG  
TGCGCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGC  
CTCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGANNAGTATG  
CCCTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTT  
CTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGA  
CACATGCATTACTTGTACAATAACGCTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGTATTGGTGCA  
TTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAAT  
GTGTATTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTG  
CTCGTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATC  
CGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCTCGCGCTACCAACCGCCCCAATTCTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
TGTTTTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGAT  
CTTTAGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGC  
CCCACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACC  
AGCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT  
AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGATTGAACCTCCGATGCCATAATTCCGGCCCCCTTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGCCCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGCTTGTNCCTGCTCACAAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCCT  
ATCCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCTGCGTCCCCCTTATACATCGC  
CACGAGAGGCCGGTTGATTCAGTATCCAAGCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTNGCC  
TTTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGTTGCGAGTCCCGTCCGTGA  
CTCACGAACATTTTTTTCGGCCCCCTCTTTCGCTCTAGGCCCTAATTNCAAGCCCCGATTCTGGGTGCGTTTG  
TAGTGTTATCACGCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTG  
CCATATGATCTCCCGCTATTAACACTCCTCAGCTCGCNAAACTGTGGCACAGTCCGTGAGCTAGTATCCCG  
GTGACGATCCATATAATAGCGCTTCCCTGTCCGATGTTGCTCCACCTGGTGAGGNGGGCGCATCACGGGTCCG  
AGGAGTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGC  
TCCTCCTCGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTANTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGC  
TCCCTGAGACGCGGAGACCNGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGA  
GTTAGCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCA  
TTACGCGCTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGAC  
CACCGACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTT  
TGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGGAGCCCCTATCCTTTCCGCATACCAAAC  
AGATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCAT



CCTGTTTCGGTTCCTCTTGTAACAACCAGATACGCTATTTGTGGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCCTTGCCTTCGTCCTCGATAGCNTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGAT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCNGGT  
TGTTTTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGANGCAAGGCCACTGCATCCACTATC  
GCTTTTACGAGAGTAATCATTTCGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTCCG  
GGGCTGTCCCTAATAGATGTANTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCANGCACTATGTCGTCAG  
ATGTTAGGTTTCGGCGTCTAGTTTTACTCGCAACCAATCACGGGCTTTTAAACCCTGCGTATCCTCCAAGGCGTT  
TCGGTGGGGCGCTGCGTTAGATCGAACGCTCNCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGG  
CGCGGATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGG  
GGTGCACAAATACCGAAGCCTTGAGCTAACTGGCNATAAGATTAACGATCTTCCATCACGATNGGTCACCTCG  
CATCGTTCCGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCC  
TTGGCGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACAC  
TCCGGCGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTGAGTGTCTGATTTGT  
ACCCAACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTNAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTT  
GTACTGGTGAAGTCGTTTCGATCATCNCTTTGAGAATAGCATTGCTCNATTCACCAAATCCGCGATTACTATTGA  
GTGTATCCTTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGC  
ACTGACATCAGTGCTTCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTAC  
GGTAACGCGGAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTTCCGTAGTCTCACGACGATA  
CATATTATTATGCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTTGTAAAGCTCAATGAAA  
GGCATTNCGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGC  
ATAGCTAGTATCTGGGGTGAGCAGCGGCCTCGTCCCGGTTTTCTGTTTTCACTGTGCCCACTGACGTTTTN  
CGACGGTTGTACTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGG  
TGCGAGCGCTCGGCCGACCAGGGCCACCCTCGCGGACNNGCTTTGTGCTGCGGCCTTCCCCCAATATCTTC  
TTCCATTGACCCTTGATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCGCGGCCCTCACTCATGTACGCGCTCT  
CTTGCTCAGCGATGCTATTCTACGTTNCTCCCGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAG  
ANCCGTTATGTGCAAANCCCCATTAATACACGTA ACTNCTAGCTTACTGAGTTTCGACCGGCGGCTCACGACG  
CTTACCCCCCGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTT  
TACTATGAGTAAATGTACCATTAATCNGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGT  
GCCCTTCTCTTCCACATCCCAGATTACCAAATTCNCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATG  
TCGGTTTTCTTACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGT  
CAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAA  
ATTACCATTGCCCTTATTGTGACGGGGAGATCCNAATATGCGGGTACCTTTACGCCGCTTTCTGTTTCGTCACCA  
GACTAGTTAGGAACCTATCCAGTACCTCTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATG  
GCGAGCACATTAACCGCTGGGTAAGGCGCAACTTGCGGAAGNGTGTGCGGGCGCTCGACACCGGCCGGG  
GGACTTTATACGCGCCCCGCTGGGCCCCGTCGCCGGAGAGCGGATAGCTCCTCATAACCCTGCANCCACGCG  
GCGGTCACTACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCG  
ACGTACCNACCACCTTAAGGCCATAGCTGTNCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGC  
TTCGGGGATTCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCT  
GGACTTGAGTACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGA  
AGTCTCTCCGTACGGGAGAAGA ACTATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCT  
GCCAGCACACGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGT  
CATCATGCTCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCNATCACGGC  
CACCCATCGAGTGTGACCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGGGTGGCACGCGGAA  
CCAATTTTGTCCGGACAACACTCAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGT  
AGACGGGTAACAATTTGACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGAC

TCGTTTGNCTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATNCTACATCGTTGGTAGA  
TAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCA  
GCTGGGATTAGTCGTGCCCGTGAGGCTTCTTNCNCCAGTGN TGCCAGGGTGTTTTGTTCTGACCTCCATC  
CAGATCATTAGCCGATACATTGAGTGN GACTCTCAACGCGCCAGGGGACCTTNCCTATTTGGTGATACAGT  
CCGAGTCTACTCCAGGGTATTTGGACCATCAAGTNGCCGTCACAAAGAAATACCATAAACACCCCCAAGCG  
CCTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCC  
CCGCATCTAGCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAG  
CTTTCTAATTCTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGT  
TATTTGACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCT  
AGTGGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTG  
ATGGTCCATCCGCGNGCTCATGCCTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTACTACA  
ACAATNCGTTCGCTCTNNTCCTCCTAGTCTGCNTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAG  
GTAGCATATCGAATANCCCTGCCTTAGCACAATTCGTAGCATCATNACTTCTACCCTCATTAACTGTTCCGAAC  
ATCCAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACNGCCTATCGCTCGAT  
GACACTCGCAGTGGACGTGCCCTTGCNCACGCCAGCGTACAAATCAACCGGCGTATTCCGTGCTACCTTAC  
TCACAACATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTA  
GCAATACATGGGGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTG  
ACCGCTGTTAAGCTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTG  
GCTCGGGAACAGGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTCTTCGCC  
GAGCTAAAGAAACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGNTGTCGCCATGGGGCGG  
CTAGTCGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCT  
CCCATACAACAACGGTCCCGGAAACCTTGTGGTAGNCGGGAGAAGCATGCGGGCTGGACNGGCCTACCAA  
GCGTTGGCACGTACCTACCCCGGTCCGGCTTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGG  
GACACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTT  
ATTTACCATTTGTCCAATCACATTCCGCTGGCCCCCATCTANCGGCAGTTGGTCCCAGGGGGCTCCCATGAT  
TACGTGTACGTGCCCCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTNGGCCATCTTCTATATCCAGCCTAG  
ACCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTCCCTCAGTACCCTTCTAGT  
CACTGAGTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTC  
TCCCCGCTTTTTGGGCTCTAGATTTGGGGCTCCNGTTCTGCGCGCGTATAGGCCAGGAAGTTTGACGATA  
CGATAATCTTTCAAGGCTTTTTACTTGGACTCCCTANTGTGTCACTGCGGGCCCTTCTTATGGCTNCGGTCTG  
AGCGCGCTGTCTACATCCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCNGG  
GGCACACAGGGATTGCACGGCAGCGCGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACA  
TGGGATCGAAGAGCGATAGAAGTGAAGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGC  
TTTGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGC  
GCTGGCCGCCGGCGGTTTTTGCGCAATTCTACGGGACGCACCGGCGTGTGACCGTTTTGACCCCATGATGGG  
GAAAGCACGGCCTNGCCTGACGGANCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAGTGTCCCGT  
GAGCACTTCTCTCTGAGTAGAGCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCAT  
ACGTTCCCGATATTGAGCGCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATN  
CAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCT  
GGCTAGTAAAGTGGCCTGNGAACGTGAGTGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGG  
CTTCTCAGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGC  
TCCATTTGGCATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTTTACGGCTGGGAAGGTTGCA  
AGAGACAGTTCCAGCACATGACATTCCGCCACAAGCNCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGA  
GAAAGACCAGGTGCGAGTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTG  
GGGATCTTCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTT

CTGCCTCGCTCCGTAATATGAACAGCCGGCGTGCGCCGTAANGCTACACAAAATCTATAGGGTATT  
CGCCGAGCAAGTAACGACAGAACGAATACCGGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTNAACTCAGC  
CGNAGACGACGGACAGGGTCCCAGGNGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGNAAGAATCA  
CCGTATGGGGNCAGAACGCCGATAGTGGCGCCANTGAAGNCCAAGGTGCTTTGATAAATCCCGGACGCN  
GGTATCAACAGCCGACGGGTCTTTTGTAGTCCGCCGACACCGTGGCNNGGATCCGAATTTGTCTCTCTGG  
TCTAAAAGGCTCGGCAACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTC  
AATGGGCTCTCTCGTTCAGGGCTCCGTACAATTGGCGATCTCATCTGTCCGAGGNGTTGAGGATTACTGAGCG  
CGGAGCCAGCGGCCGACGACGGATCGGTGTGAGATNGACGTTTATCGTGTGGAAAAGAGTAGGGTGTAG  
GGGGTTCCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGNTGTNGTAGTGTAGGTCCCA  
CGCCCCAAGGCTCTCGGCGAGTGTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAA  
GGGCGACGGGGACAGCAGATCGANNTCAGACTCGGACGCAAGCACAAGGTGTAGNGATTACATCTCGTCTG  
GGGGCAAGTCGGATGAGGTTGCCGAGACCAACGCCGACAGTAATTTCCATAGGNAAACCCCTCTTGA  
ATCTGTACCGCTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACA  
GGAGCTGGNTGATCAGTAGCTACNGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAG  
GCCCTACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGC  
GTCGTCTATACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATNCGAACGGCGGCTAAGTA  
GGGGGCTAGGCCTTCGTACGGTGTATGTATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCC  
TAGTACGTGGGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTAT  
TACCAACGACGCAGACCAAAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTNTAACCC  
TGTCAGCGCCATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCCG  
TGTACGATTCACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAA  
AGCACGCGCGCTTCGCCCTGACTATCGACCCGCGTGTNNCAAGCAAGCATCCCGANAATCATGTCCAGT  
ATACCCCTCTTTGTTCTCTCTGGGTTGTGCGCTNGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCT  
CGAACCCAGGCGACCGGGCAATACAGGGGACAAACACAGGACTCCACGCCGCTTTTTGACTGAATCGC  
GNCCTACTTGCCGATGTATATAATAAAACGAGACCCGGGCCCTACAGTTGTCTGAAATGGACTTATACTCG  
ACCACGCTGCGAGTACTACCGCTACGTGGCCATTTCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCAC  
GAACGTTCTACGAAAGAGTCCCCGTCTAAGGNNTCAAGTTGACCNGTCAAAGGTCCGGCGGTTGGCTACTA  
GAGGACCATGCAAGGCGATCGGAGTCCCCTCANNCGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGAT  
AGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCNATCGGGGACTAGAGAGAAATATATGCCTACGGTT  
ACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGAC  
AGTGACCGTACCGTCATCAATAATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGA  
GCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGA  
TGTCAGACCCCGAGGTGTAGCGAGCGAGCGGAATCNGATCGAATGAAAAAGCTGTGCATCCGGAAACACC  
GTCTTAAGAATCGCAAATTGAGGGCGCTGACAGCCATCCACTGCNGTGGCAAGTGTACGTCATACCTACCAAG  
CGGTCCCAAGTAGCCTAACGGCGGGGNTAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTG  
ATGTGGCTGTTACAGCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGAT  
GCCGAACCCAATCCAATAATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTT  
GAGCGTACCCCAAGGGAAGGAGCCGTAATAACCAACAGTAGAAAAACGACCTAGNGGCAACCGGGACAAT  
CAATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCG  
CATTAGAGCATGTGGACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTG  
GCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTGCGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTC  
GATTAATACACCGCCGCTTAAAGTCAGCGGACCAAAAAGATAGGGACCAAGTAGGTTTGTACAGTTAATAATG  
ACAACGCCAGAGCTGGATACGAAGTAACGGCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCC  
GGGGGGGCGTCTTAGGAATCGCGGGTGTGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTA  
TCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAA

TACCGGTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAA  
TCGGCCCTATCTACCGATGAGGAGTGCAGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAG  
GCNAGTGGGGTAAAAACACGGAGAGGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTC  
GAGCGTCCATGAATCAGGTTGATGTNAAAGTACCCGTAGACCAACCGNGGTGGTGCTGGACATAGATTAA  
CACAGTGCCGCCAGGGGTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGA  
ATTAGGAGCGGTTTCTCCGGACACGAAACCGCGAAGNGGGGTAGCGGACCAAAGNGAGTGTGGATGCTC  
AAGAGACTCCGACTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTT  
GGCGAGGACCTNGTGTGTTACGGTGGTGGCCAGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACC  
CTCTGGACTGACCAAGAAGGCGACGCAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCA  
TTAATGAAATACGGACGAATCCGATGCCGTTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGGCC  
ATAGGAGAGGCTATGGCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGC  
GCGTTCGTTACGCCAGTGAATACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTGGCCAACAAGCGG  
AGCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGATATTGGTGGNTGTAGTGTCTGGAAGGGGTGA  
CGAGAATATGGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTG  
GGGAGTATAGTAAGAAACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTA  
CAAACAGCCCTAAGGGCCAAGCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGT  
TGCAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACNGTTCAGTGAAATCAAT  
ACCCCTAAGACCAATTTTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGC  
GAAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGT  
AACGAAAAGTNTCAGCAGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCG  
GGAGGGAATGGAGCCCAGAACATGGCTATTATGAGGGATCCGCTCTCATTGGGACCCCTCTCATGTAATATT  
AGTGTGTGTGGCGAGACGGCCTTCTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGG  
CACGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCAT  
CGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAAC  
GAGGGTACAACGCCCGCTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCAT  
CCCGAACCGCCACGTAGCAGAGCAAGAAGTTGNTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACC  
AGTATGATGCCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTG  
GCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGN  
GACGCATTTAGATTTGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACG  
CCGAACCTGACGAATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGC  
GGCCAGGCATTACCCGGTGAAGACTTTAATAGGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGG  
AGGGCGGAAATCTCCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTC  
CGGCAACCGTAATCCCGACAGCGGCTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTT  
GTGGGGATCGGCCGAACCTGACTATCATGCGAGGGGGAGGCNATCGTCTCCTCCATGCCCTTTATAGGAGAAA  
GATTCTGCACCAGGGCTTGCGCCTAGCATTGATTTTCTTGGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAA  
NNAACGAAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTNGCGTTGCAAATTCGGC  
GAAAGGCGGTCATGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCC  
TTAGGCCGTGACTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTT  
GTTGAACGTGGTACCATAGACACGCAGACAAAGACACCCCAATTGTCGCTACAGAGGTGTCCTCATTGTATGGT  
GCATACGCAGTACTCTCAGATTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACC  
GCAAGAAAACCAGCTACCCCGCTCCAAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGA  
TTCAGAAGTTTGGGAGGAGCTTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGG  
ATGGTGTCTAACAGCAATGTCCTAAGGCCAGTGGCATTANAAAATATCTCGACCGGGTGGGCGGAGAAAGAG  
TGAAAAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGG  
ACCACGGGGGCATGGAAGATTGTCACCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGA

GGGACCCGGAGTTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCA  
GAGCATCTCAGAAGACGGTGNAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGC  
ACGAAGGAAGACTGGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACG  
AGCCAGGATGGGACTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCC  
CATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATG  
GGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTA  
GCCCCTGCGCGTGAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCA  
CCTCTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCG  
AGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGT  
ATGCCACTCCCCGGATGAGAGCCTCTGACGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGC  
CTGATTGGTAACGGAGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGA  
TGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCGA  
CGCTTAGATGTAGTAGGCAGCCCTCCATTNGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAG  
TTCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCCAAGTTAAAGTCTCTGCCGACATGAGACCGGGGA  
GAGATAACAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGC  
CTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACA  
CTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTA  
CGCACCCCTGCGCACCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTG  
CCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGCCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAG  
GCAAAGCACCCCTTGTGTTAANNTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTG  
ATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAA  
CCAGGCAAAGAGAAACAACGTAACGATCTGGTTGGAGCTTTGCTATACTGACAAATGACTCACCTTTGAAAG  
TACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCT  
AAGTGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACC  
AATCTAGCTGGACTATACCATTGATCGAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATG  
GCTTGACGGGGAAAGGTCCGAGGCGGTCCAAACGCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCC  
CCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGT  
ACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCC  
GTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAA  
CTGATTACAGCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACA  
CCGGAGACTCCAGGCCGATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTA  
CATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGG  
AAGGGACGGTTATGATACCTTACCCGGTCAAAAAGCGACAGACCCTCAGACAACGCTAACCACGACCCCAAGT  
GAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTG  
AACCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTG  
TTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGNGTAGAGTGCCAGCAGAGT  
AGCTGCACATCTCCCTCCGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACT  
CTAGCTGAAGATAACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTT  
GATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGG  
AAACGAAAAATCTACTCCGACGGGGGATCCCCTCAAATCCGCACGAGGTTACCCCCGCGCGCCGCACTCT  
TGTTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCT  
CCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAG  
TATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGAGGGCCGGTACGGGAAAGAGGGGGACCAGCA  
GACGTTTGCCGAGAGACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCC  
CTAATGAGGCGGTGTCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGC

CTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTAC  
AGAGTCACCAAGGTTTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAAGCGGTAATC  
CGTCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGC  
ACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGG  
TTTGATAGGGTAGCGTCAAAGGCCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAG  
TTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACA  
ACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGT  
GATGAGGCTGCGAACGAAGTAGACGGCTCACTATTTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGG  
CCTTTGGGCTGCTCTGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCA  
ACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTCCACCGTATAA  
GTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTGAGTAGCTCAGGTGCCGGGCAAGT  
CGCCGTAAAGTTTCTGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCTAACAAAGGCGAGGAAACAAAGT  
GAGTGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTG  
TTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGGCTCG  
GGGTCCCACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGG  
CAGTTCATCGGCTACCTAGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGAA  
GCATCGTGCTACCAGCCGCGATAAGATACCCGCAAAGAGTGCATAAAG

>P17, North West\_14, VIM, 03.10

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTTCTTACTGTCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCTAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT

AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTACGGTAATTTTTGTGCCGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGCTGACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTGTCTACC  
TCGATATAATAACANAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATA  
AAGGTGCGTGTTCCGGGAGGATTAGATACAGTTTCTTGTAGCCCCTATCCTTCCGCATACCAAACAGATTAG  
TCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTGCGATCCTGTTT  
GGTTCCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGTAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCTAGCTAAATATCACCTCTTCAGGTTCTTCGTGCCCCGTTTGGTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGTC  
CCTAATAGATGACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTGAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGAGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCCTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACNGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCCGG  
TCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCC  
CCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGGACAACACACACTCCGGCGCTC  
ATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
CTAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGTCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGA  
AGTGGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTA  
ATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCA  
GTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCG  
GCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGTCTCCTCCGTAGTCTCACGACGATAACCATATTATT  
ATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTG  
TGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGTGCCCCGGCCTTACTAGCCTGCATAGCTAGTA

TCTGGGGTGAGCAGCGGCCTCGTCCCGTTTTCTGTTTCACACTGTGCCACTGACGTTTTACGACGGTTGT  
GTACTCGTGGATGCCTATCGCTTTTTTTCTTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGGCAGCGCT  
CGGCCGACCAGGGCCACCCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACC  
CTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAGCG  
ATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTC  
GAAATCCCATTAAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCGC  
CGTCGCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGCTGGGGTCCCTCCCTTTACTATGAGTAAA  
TGTACCATTAATCAGTGACGCCATTGNAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTTCC  
ACATCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACT  
CCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAAAATAAATTTA  
GATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCC  
TTATTGTGACGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTCTGTCGCCAGACTAGGTTAGG  
AACCTATCCAGTACCTCTCCGTA ACTCGCTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA  
AACCGCTGGGTAAGGCGCAACTTGGCGAAGTGTGTTGCCGGCGCTCGACACCGGCCGGGGGACTTTATACGC  
GCCCCGCTGGGNCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGCGGTCACTACGC  
CTCCCCTTTACAGACCCTCTGTA AATGCTGGGAGTCTCCTTTGACCCGAGGGGTCCCGACGTACCTACCCA  
CCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTGGGGATTCCCC  
GCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCNTTGGCCACCTGGACTTNAGNCAC  
GACCTNGATCGGTCAAGCGAGGGGTACCCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCTCCGT  
ACGGGAGAAGNACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACG  
TTGGCTAACCGCTCGAATTAAGCCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTT  
CGACCCCCGNTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGT  
GTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCC  
GGACAACACTCAAAGTCGTGTGGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAAC  
AATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTG  
TAGGCCTCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCA  
AGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAG  
TCGTGCCCCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAG  
CCGATANATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTACT  
CCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGT  
GGGCGCTCTGTTTTAGTAGTTCATATCGTCGTTACGCGGCACTACTAATGGTACCAGTCCCCGCATCTAGCT  
GGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCT  
CTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTTGACTC  
CTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACT  
ATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCC  
GCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCC  
GCTCTGNCCTCCTNGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGGCGACGCCAGCGTACAAAACAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTCTTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA



GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTGCGGCTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCCGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGC  
ACGGCAGCGNAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGA  
TAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTGGCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCNGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGTTCTAAAAGGGTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTGAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACA  
ACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCG  
CAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAG  
GTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGA  
TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTAC  
GGTGTATGTGACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCGATCGGGCCGTTATTACCAACGACGACAGACAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTCACAAAGAGC

CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCC  
TGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
CTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTNGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGNGGTGCGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTTCTCCGGACACG  
AAACCGGAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTTCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTTCGTTACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTGCGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGNAACCTATGTCA  
TGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCC  
GGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAA  
TACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTTAAAGCCAT  
TATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGG  
CGAAAAGGCGGTGACAAATTTGCGGCCCGGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAA  
ATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGG

CTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTT  
CGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGA  
AACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCG  
CGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAG  
CCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACGCCACGTAGCAGAGCAAG  
AAGTTGCTTGTAACTGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAG  
AGCAGCGTAATAGAAGGGNGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAG  
CTGTGGTGATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTCCAAGA  
GTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCA  
GCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGAC  
TTAATAGGCGGAGGTCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAA  
TCCAGGCTGAAAGAGTGATCAGAGCGCAACAAACGACTCAGGATCCGGCAACCGTAATCCCGACAGCGGC  
GTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATC  
ATGCGAGGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTA  
GCATTTGATTTTCTTGTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAACTGAACGTGGACAAG  
AGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATG  
GGGCGGGGTGAGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTG  
ACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGC  
AGACAAAGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTT  
CAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCC  
AAGTACGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTG  
GCATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAA  
GGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGG  
GGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTC  
ACCATAAGCAGGGAACCTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCC  
GCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCA  
CGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAA  
GCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTC  
GCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAG  
GGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTGATA  
GCTATTTAGAATCCCTAGCCACAGATCTCGTCTTCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGG  
CGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGT  
CACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCT  
CTGGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATT  
CTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCAC  
AGGAGACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCT  
CCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAG  
GAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGGACCC  
TCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAG  
TCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGNCGACGTACACTGTACGGGGAGATAAAGTAGGG  
CCGTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAA  
ATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAG  
GGAATAAGTTTGGCGATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGT  
GACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACAGGT

CCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAAC  
GATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCC  
TAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGNTACACAGGTCC  
GAAGGACGAACAGCTGACAGTGAAGCACTATTGCCCCCAATGACCAATCTAGCTGGACTATACCATTGAT  
CGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGG  
CGGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGT  
GGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
CGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACT  
GGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGA  
GCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATT  
CTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTAC  
TTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACC  
CGGTCAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCAGTGGAGTGGTACCCAGATACTGAATT  
GCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGG  
ACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTGGTCTAA  
GCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCAT  
CGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAG  
GAACCCCTCTCTCGAACTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCC  
GGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACG  
GGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTCTGCCTG  
GATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTTAATCCAAGAG  
GAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCA  
GACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCA  
GGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGGCGGTGTCGAAAATA  
CTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATA  
AATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTTCGGATCAG  
GCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTG  
GGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTG  
TGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCC  
GCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCT  
TTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGA  
ATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGAC  
GGCTCACTATTGATGGGTGCCGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGG  
CAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTAGAGGAGCTCCCGCACTT  
ACTGGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAAGTGCACCAACCATGCGATCCTTG  
GNGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT  
CATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTCCGTCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P16, Lonon\_17, VIM-2, 02.10

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCCTTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGTGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACCTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGCGGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAGGAGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTCTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCGTCCAAAGAGTTAGCT

TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGCATGGTCTGTAAAATATCGGGACCAACCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTTCGTTCCCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCGTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTGACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG

AGAAGA ACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAAGTCGTGTCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGACAATTCTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTTAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTCACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACACAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCNATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCTGTCCCTACGTTGCGCTGGCCGCCGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTGTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC

AGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCGCGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTAC  
AGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGACAACGAGGGCA  
CTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGCGGCTAAGTAGGGGGTACGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGGCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA



GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGC  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ATCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGAATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCATC  
AGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAAACTTTA  
GGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTATGCGCGCTCGT  
GCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCCGCTATGAGAGCCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGCT

GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACTTGTGGTGTTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCAT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAAGGGAAAGGTCGAGGCGGTC  
CAAACGTCTCCCCTTCTGTTGAACTGTACCCAGGATCCTTCTCCCCCTGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAAGTATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCAACATCGAGAGGAGGACGCGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGCGTACTACTATAACTGAGAAGTGGTCACTTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG

GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCTTCCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P43\_1, London\_9, VIM-2, 11.12

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAAGTAGACGTTTCTTTTCGCGCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGCGAGGGTCTTCTCGTCTATTCCGGCCTTGTCCCACC  
GCCCTACTCGGTGCGCGGNTGGAAAGCTATATAGGTTGCTCTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT

GTATTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACCGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACANTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTTAAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGA  
GTGGCCTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGC G CATTATTAGCACGCTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTAGTAGCCCCCNAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTTCGGTTCTCTTGTAAACAACCAGATACGCTATTTGTCCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTNGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCCAGGTTCTTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATNTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
GTCCCTAATAGATGTA CTG CATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGTG  
GGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAGTGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG

TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCCTGTAAAACCTATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGACGGTT  
GTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCCTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
GTCGAAATCCCCATTAATACACGTAACCTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCCGGCACGGATCTTAGCTGTGCCCTTCTCTT  
TCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTTCCGTAACCTCGTGGTGTGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGGGTCCTACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCGCCTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCA  
CGACCTCNATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCCG  
TACGGGAGAAGAATAATTTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTNTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATAAGGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGTACTCAAGGTAGCATATCG  
AATATCCCTGCCCTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAACCTGTTCCGAACATCCAATGATGC  
TTTACAGGTCACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT

GGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAACAGG  
TNAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTGCGCCTGGTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTAC  
CTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGTGTACCAGGGGGTATTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTCCCTCAGTCACCTTCTAGTCANTGAGTACGATATT  
TGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGC  
TCTAGATTTGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACAT  
CCATGGNGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGACCAGGGATTG  
CACGGCAGCGCGAGGTGATGTCCNGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCG  
ATAGAACTGAGCGCAATTACAATACGTCTCTACGTGTACTAACCTATAAGTCAGGCTTTGTCACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCGGATTTTTAGTTGCAAGTGGAAAGTGTCCCGTGAGCACTTCTCTCCTGAGT  
AGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCG  
CTTTAATCTATCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAACGCATCCAGGGTTCTGCGCTGCGA  
AGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTACGCGTGTGGCTAGTAAAGTGGCCTG  
CGAACGTCAGATGGGCCGCGCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCCAATGCA  
CAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGG  
TACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACA  
TGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGT  
AGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCA  
ATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACTC  
GTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCCCGGAGCAAGTAACGA  
CAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGCTCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGTAGGGGGGTTCCACCGCGAC  
AACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGC  
GCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCA  
GATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGA  
GGTTGCCCGAGACCAACGCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTGTACCGCTATTCTGG  
ATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTA  
GCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGT

CTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCC  
AACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTA  
CGGTGTATGTGTATTGGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCNGCC  
TCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTCAGCGCCATAACCCCA  
AAGAGTTCAATGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGCGCTTCGCCC  
TGACTATCGACCCGCGTGTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCTCCTTTGTTCTCTCT  
GGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACC  
CTACGTGGCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTGATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGA  
GCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGG  
GCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCAAGTAGCCTAACGGCG  
GGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGT  
ATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATATT  
TAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCC  
GTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAG  
CGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGA  
ACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCG  
CTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGGCTCTGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGG  
GTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAAGCGGAGCAAAACGGTAGGCGAGGAACAAA  
GTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATC  
GGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCAT

GGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCG  
GATTGCCGCTGCTAGGCGGAAGTGC GGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAAT  
ACCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAAGCCATT  
ATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGC  
GAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAA  
TGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGC  
TATTATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTC  
GGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAA  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGC  
CCACGGGGGAATCCTCGCTGCGTGTGTTGGGCGGGTGGTTCCATCCCGAACCGCCACGTAGCAGAGCAAGA  
AGTTGCTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGA  
GCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCT  
GTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCNGCCAAGAGT  
ATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGC  
CTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTT  
AATAGGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATC  
CAGGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGGC  
TCAGTTGGGGAACAGCGTACCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCA  
TGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGC  
ATTTGATTTTCTTGGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAG  
AGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTATGATAGTATATGGG  
GCGGGGTGAGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGAC  
GAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTGAGGTTGTTAACGTGGTACCATAGACACGCGAG  
ACAAAGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGATTCCAA  
TGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAA  
GTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTGAGAAGTTTGGGAGGAGCTCTTGGC  
ATTTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGG  
CCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAAAAATGGAATACATTCCGCGGGG  
GGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCAC  
CATAAGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGC  
AGGGGGGAAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACT  
GCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCAC  
GCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAG  
CATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTGATAACCTTCG  
CAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGG  
GGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGC  
TATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCG  
AGTCCAGTAGTCTCACCACTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCA  
CACGGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCT  
GACGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCT  
AGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACA  
GGAGACGTTGACGCCCCGAGCGTCTGATGTTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTC  
CCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGG  
AGCATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACCTGAGATAACAAGGATCGTATGGACCT



CAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAGT  
CCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGC  
CGTCTAGCCCTTACTCATGGCCAAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAA  
TTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGG  
GAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTG  
ACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAACTACAGGTC  
CCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACG  
ATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCT  
AAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCG  
AAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATC  
GCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGNTGGCTTGCAGGGGAAAGGTCCGAGGC  
GGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCTCGTAATGAGGAGTGTGGGTG  
GAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTT  
GCAAGAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTG  
GGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTCATGGAG  
CCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTC  
TGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACT  
TCTATTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCC  
GGTCAAAGCGACAGACCTCAGACAACGTCTAACACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTG  
CCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGA  
CCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAG  
CACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATC  
GAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGG  
AACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCAAAGTATGGAGCCG  
GGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAACGAAAAATCTACTCCGACGG  
GGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTGTTATTACGATCTTTCTGCTGG  
ATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGG  
AGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAG  
ACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAG  
GTCGTGCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACT  
CTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAA  
TGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGC  
AACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGG  
TGCCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTG  
GCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCG  
CCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTT  
TCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGTACGCTGTATCCGAA  
TACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACG  
GCTCACTATTGATGGGTGCCGGGGGCGCGCTCACAAACGGCGTGGCCTTGGGCTGCTCTGGACTAAGGGC  
AAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTA  
CTGGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAG  
GTGATAGTCAGTGACAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGGACAA  
GAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTG  
GGGGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCA  
GGTGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTT

CATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAA  
CGTCGGATGTACACAATAGCGAATGGTGGGTGGTCCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAA  
GATACCCGCAAAGAGTGCATAAAG

>P51\_1, London\_9, VIM, 02.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACACTGCATGGCATGCATTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGTGGAAAGCTATATAGTTGTCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTGTAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTATTCTACGCCGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCC  
GATCTGGATCTCCATTACATTAACNGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCANCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGCAGGTTCCCGTCCGTGACTCACG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGTTCGCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCTATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC

GATCCATATAATAGCGCTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTGAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTCTGGTTCGCATCCTG  
TTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGTTCCTCGTGCCCGTTTTGGT  
TTGGGTCTCCTTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGCNNGGCCACTGCATCCACTATCGCTTT  
TACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCT  
GTCCTAATAGATGTAATGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTTCGGTG  
GGGCGTGCCTTAGATCGAACGCTCCCCACTAAACCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGCGCT  
GCCCCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAGTAGGTGAGTGTCTGATTTGTACCCAAC  
GCNCTAGCCTGCCCTTGTAGCCGTCACTTAAATCTGAGGGGTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTAATCGTCACGCCGATGGTCTGTAAACTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATAACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAACTCTTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCTGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTT  
GTGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCCTTCCCCCAATATCTTCTTCCATTGA  
CCCTTGATTAACCAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATTAAATACACGTAACACTAGCTTACTGAGTTTCGNCCGGCGGCTCACGACGCTTACCCCC  
CGCCGTCGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTCT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGAAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCAAATATGCGGGTACCTTTACGCCGCTTTCNGTTCGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC

GCGCCCCGCTGGGNCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCCTACTAC  
GCCTCCCCCTTTCAGACCCTCTCGTAAATGCTGGGGANTCTCCTTTGACCCCCGAGGGGTCCCGACGTACCTTACC  
CACCTTAAGGCCATAGCTGTGCNCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCA  
CGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCCTCCTCCG  
TACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACAC  
GTTGGCTAACCGCTCGAATTAAGCCCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTTCATCATGTCT  
CTCGACCCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTNCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGNTA  
ACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTACTCTGCGCTCCGACTCTGGAGGAGTCTCTANNCTACATCGTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTTCCCGCCAGTGNTGGCCAGGGTGTTCCTGTTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGNCTCTCAACGCGCCAGGGGACCTTCTCTATTTGGTGATACAGTCCGCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGTTCATATCGNCGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTA  
GCTGGGTAGTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAAT  
TCTCTTTTCGCTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTGA  
CTCCTGAGCAGCTGTAGAAGGTGTGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTT  
ACTATTGCCGTTGGTCACGACGANGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCA  
TCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAAGGCTCTACTGGCAGCGATTTCTTTACTACAACAATCCGT  
TCCGCTCTGCTCCTCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATAT  
CGAATATCCCTGCCTTAGCACAATTGCTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGAT  
GCTTTCAAGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCA  
GTGGACGTGCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATN  
ACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATG  
GGGAGAATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTACAGCGGTTTCATAGGATTGACCGNTANTA  
AGCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTCGGGAAC  
AGGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTCTTCGCCGAGCTAAAGA  
AACCGGGAGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTC  
CTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGCGGGTCTGTGGAGGAAGACCTCCATTACAAC  
AACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGGCCTACCAAGCGTTGGCACG  
TCACCTCACCCCGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCG  
AGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTATTTACCATTGT  
CCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCATGATTACGTGTACGTGC  
CCCCCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTA  
CAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCAACCTTCTAGTCACTGAGTACGAT  
ATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTGG  
GCTCTAGATTTGGGGGCNCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCA  
AGGCTTTTTACTTGGACTCCCTATTGTGCTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTA  
CATCCATGGCGTCCCTATACCTTAGTCGGATCCTGTTCTGGCCTATACAGAAAGCTGGGGGCACCGGGAT  
TGCACGGCAGCGNGAGGTGATGTCCGGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAG  
CGATAGAAGTGGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC

GGTTTTGCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTTCGTCTAACCGGATTTTTAGTTCGCAAGTGAAAGTGTCCCCTGAGCACTTCTCTCCTG  
AGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGA  
GCGCTTTAATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTG  
CGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGC  
CTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAAT  
GCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGNCCACGTGCTCCATTTGGCATTGGG  
TGGTACGAAACCGCACTCGGCAAGCNCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGC  
ACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCG  
AGTAGGTCGGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTATAC  
TCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAC  
TCGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAATCTATAGGGTATTCCCGGAGCAAGTAAC  
GACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGAC  
AGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGA  
ACGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGAC  
GGTCTTTTTGAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGGTCTAAAAGGCTCGGCA  
ACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTC  
AGGGTCCGTACAATTGGNGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGGCC  
GACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAGAGTAGGGNNCTAGGGGGGTTCCACCCGCG  
ACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCG  
GCGCAGTGCTACATGTCACCATAGGCAACCCGTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAG  
CAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTANATCTCGNTCGGGGGGCAAGTCGGAT  
GAGGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTCTGAATCTGTACCGTATTCT  
GGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAG  
TAGTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTA  
GTCTACGCCNACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGCTATACTACTAC  
CCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGAAACGCGGCTAAGTAGGGGGCTAGGCCTTC  
GTACGGTGTATGTGATTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCA  
GCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGAGTCGGGCCCCGATTNCCAACGACGCAGA  
CCAAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACC  
CCCAAAGAGTTCAATGACCNATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTGACGATTACAAA  
GAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCGAAAGCACGCGCGGTTTC  
GCCCTGACTATCGACCCGCGTGTACCAANCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCC  
TCTCTGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCG  
GGCAATACAGGGGACAAACACACGGACNCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATG  
TCATATAATAAAAACGAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACT  
ACCGTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGA  
GTCNCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCG  
ATCGGAGTCCCCTTACAGACGGCTCTCGAGACTATCCCAAAGCCTCTCTGGGNATAGCAGGAGCTTAACTGTC  
CCGATTCAAAGAACNCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAAT  
NNAGTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATC  
AATAATCCCACAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACG  
CAGGTATCGTCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGANGATGTCAGACCCCGAGGTGT  
AGCGAGCGAGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGAAATT  
GAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTANCAAGCGGTCCCAAGTAGCCTAA

CGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCT  
GGCCGTATACACTTAAGTTCAGATCGTGACCAANAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCA  
AAATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAA  
GGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAA  
AGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCC  
GAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAG  
AAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTTCGATTAATACACCCCGCTT  
TAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTGACAGTTAATAATGACAACGCCAGAGCTGGAT  
ACGAAGTAACGTCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGA  
ATCGCGGGTGANCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGT  
CAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCT  
GTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGA  
TGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAAC  
ACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCA  
GGTTGATGTCAAAGTACCCGTAGACCAACCGANGTCGGTGTGACATAGATTAACACAGTGCCGCCAGGGG  
TCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGTTTCCTC  
CGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACA  
GCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGT  
CACGGTGGTGGCCAGCTGAGGTTTCGCGATGTAACCCNACTATANTAAGAANCCTCTGGACTGACCAAGAAG  
GCGACGAAAAGAAACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAA  
TCCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGT  
CCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAA  
TACCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGCCAACAAGCGGAGCAAAACGGTAGGGCGAGG  
AACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCA  
AACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACNT  
ATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTNNAACAGCCCTAAGGGCCAA  
GCTGCCGATTGCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAG  
GGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTAAA  
AGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACANTGTGGCGAAAGGCAACAACAGGAAA  
AGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGG  
CAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGA  
ACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGG  
CCTTCTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCT  
GGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAAT  
TCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCT  
ATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGGCGGGTGGTTCCATCCCGAACCCGACGTA  
GAGCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAATGATGCCACAGCGTA  
CAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTT  
AGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCAAGATTGTCGCGACGCATTTAGATTTGCN  
GCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCNACGCCGAACCTGACGAATAA  
AACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGG  
NGAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCG  
TTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATCCGGCAACCGTAATCCCG  
ACAGCGGCGTCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCATACGCTTGTGGGGATCGGCCGAA  
CTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCT

TGCGCCTAGCATTGATTTCTTTGCNTAGGCACTTCGTAGTGGGTACTGATCGAAACGAACGAAACTGAACG  
TGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGAT  
AGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGA  
TGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTNAGGTTTCGTTGAACGTGGTACCAT  
AGACACGCAGACAAAGACACCCCATTGTCTGCTACAGAGGTGCTCTCATTGTATGGTGCATACGCAGTGACTCT  
TCAGATTCCNATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTA  
CCCCGCTCCAAGTGCACACGCTTTGGTGTGAGGTATCAAATGCTTCCACGTACGATTGAGAAGTTTGGGAG  
GAGCTCTTGGCATTCAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCA  
ATGTCCTAAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAAAAATGGAATAC  
ATTCCGCGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGG  
AAGATTGTCACCATAAGCAGGGAACTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTAT  
CATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGA  
CGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTG  
GGAGAAGTCACGCTATCAGGAACTATGTCAAGTATACAGGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGA  
CTCAACGCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGT  
CATAACCCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAG  
TTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGA  
AAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAAT  
GGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGA  
GTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGG  
ATGAGAGCCTCTGACGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGG  
AGCCTGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACC  
GCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCTGATGTTGTGACGGGGAGGCGACGCTTAGATGTAGT  
AGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTCCGCGCTTTGCAA  
CTGGGCATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCCGGGAACTGAGATAACAAGGATC  
GTATGGACCCCTAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACG  
GAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGAT  
AAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCA  
CCGAAGGAAATTTTCTCGGGCGGTTACCTAAGGTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTG  
AGGAGTAGGGAATAAGTTTCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTG  
TGTTAATNTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATNGTACCTGGTTAA  
ACTACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCAGGCAAAGAGAAA  
CAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAAGTACGCGCGGAGGGAT  
CCGCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATA  
CACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTA  
TACCATTGATCGAAATACAAGCAATGTTTCCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAA  
GGTCCGAGGGCGGTCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGG  
AGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTACGATAACGGTCTGCGTTGGAGTACTATAGACTAGGG  
CCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAG  
AGCCGACACTGGGTCTAGCGGGTGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTAT  
TTTTCATGGAGCCGCTCAATAGCGGGCTTTCTTAAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAG  
GCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCCGACTACATCAATAATCCAA  
GGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGCCAGAAGGGAAGGGACGGTTAT  
GATACCTTACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCCAGACCCCAAGTGGAGTGGTACCCAG  
ATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGG

ACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAG  
TTGGTCTAAGCACACCGTCTGGGGTGCCGAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCC  
CTCCGGCATCGAGAAGGGCGGTTGNCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAC  
CACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGGACACTACGTTGATGCTCCAACTG  
ATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATACAGGGGTGGGACGGAAACGAAAAATCTA  
CTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTT  
TCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGTTGTAA  
TCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACC  
TAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGA  
GACCAGCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGT  
CGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAG  
CGTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTT  
CGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGC  
CTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTA  
TCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGGTAGCGT  
CAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCA  
ATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCT  
GTATCCGAATACGACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCCTTGTGATGAGGCTGCGAACG  
AAGTAGACGGCTCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGG  
ACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTTAAGCAACGACTTAGAGGAGCTC  
CCGCACTTACTGGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAA  
ATCGCGAGGTGATAGTCAGTGACAGGAGGTGTAGTAGCTCAGGTGCCGGCAAGTCGCCGTAAGTTTTCTGT  
CGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAGGAAACAAGTGAGTGCCCGAACCATG  
CGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACG  
CAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAATTAAGTGGCGGCTCGGGTCCCACGCATGG  
TATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCT  
AGCTCGTAACGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGTACCAGC  
CGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P45, London\_17, VIM, 12.12

TCCCTCGTCCCTAGTATGAACCTCTCTTACTGCTGTCCAAATNGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACNNATTGTCGNNNCTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGG  
ANCGGCATAGTNGACGTTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTA  
AGACATTTAACTGTCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCT  
CTCTCCGGGACTGACTCTGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTTACCCGACTATCTATTGCTGCGCTTACCNCCCCCAGTTTTCGCGCCTTACCCGAGCT  
TATCTTAGTNTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCAACGGGCCTTGAGTGAACA  
GAGTGANTTCTTCTGGGGGATTGTTGTGTGCCCTTTCGGAGGGTCTTTCTCGTCTATTGCGCGCTTGTCCCAC  
CGCCCTACTCGGTGCGCGCTGGAAAGCTATATAGGTTGTCCTTCCGCACCACTGGCGCCCCGCCGATGAT  
CAGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGNTCCTNTCGGTTTCTCTCGAAGGGTCTTCTA  
AGTAAGTCGTTAGGGCGCAGAGGAGCACCTATCGTGTGCGTGNAGACTGCCTTTGNGTCCGCGCACTGC



CTCAGTTTTGCCACNTGCGGTCCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGANCGACTAGTATG  
CCCTANCCGTTTACGATCCNTGCGCGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATNTGGTTCGGGT  
TCTGGCNGCTCTGGCNTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACNAAGAATGGAACGG  
ACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTCCCTATTGCCGTATTGGTGC  
ATTGGAGANTGACACCCTACACTTCTACCACNTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAA  
TGTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTGGGTACGGCGCATTCTTGACCTCAATATCAACCT  
GCTCGTATGGACATTTNTANNAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAAT  
CCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGCGCGACTCGCCCTNACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTCCGCTTG  
TCTACACTATCGCTGTTGCNGACTANACCGGTGGGTGCGGTGNATGGTTGAGTCCGACCCCATCATCTCAAC  
TTGTTTTACCACTACTCAACTTTTGTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCCTGGA  
TCTTTAGATCGCTTTATCGGGGCACGCAGANCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAG  
CCCCACGTTGGTGGCGAGTCGACATCGTCAGTCCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACC  
CAGCCGATCTGGATCTCCATTACATTAACNGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGT  
TAACCTAACTTTGGACCCGCGGTAANATGAACGCGTTTCNCTAGACGTTTAGTTTAACTTCCCTGCTGCG  
AGCTAGGATCTCGCCTCGACGTATTGAACTCCGATGCCANAATTCCGGCCCCCTTNCACATATAGGCGTGCCAC  
NGGACTATTTGTGGACATNNGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGC  
GGTTGCNCGTACCACATTCATCCTCCTCTTTCTTAAAGGAGNGTTGGGCCCGCTATAGGCGCGCCTAAGGC  
TCNNCCAGCCGNTTNTCCTCCTGCTCANAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTCCTCC  
CGCTATCCTCGANACGCAATGTAGGTGGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACA  
TCGCCACGANAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCAGCTTT  
GCCTTTGCGGGAACCCATGCTGCAAGCCGCCAGGCGTTCCCGTGAGGCGGGTCCGGTGCAGTTCCCGTCCG  
TGA CTCACGAACATTTTTTNGGCCCTCTTTCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGGT  
TTGTAGTGTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCNTTCCGGGGNCACCTCATGTT  
CTGCCATATGANCTCCNCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATC  
CCGGTGACGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGT  
CGGAGGAGTGGCCTTGACTAGGGCGCCACACTCCCGACTNTGGGACGNNTCATNAATGCGGACTGACTCC  
ACGCTCCTCNTCGCAGGTAATCTCTTTCGGTAGTAATGGAGTGCCGGTGCAGCATTATTAGCACGCTTACTTAC  
GGAGGTACCCGTGCTGAGCGTAGGCACGGTCTGTTGCCNNGCAACCTGCAAATATGCCTTTCNGTAGCCCN  
CCAGCTCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACACCACGGCCGAGCGCGTCCN  
NAGAGTNAGCTTACC GCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGNACGATTGCTAAGAT  
ATCCATTACGCGCTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATNATTGAGTGTAATG  
CTGACCACCGACCCANCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTT  
ACTTTTGTCTACCTCGATATAATAACANAGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTT  
TGCTAACTATAAAGGTGCGTNTTCCGGGAGGNTTAGATACAGTTCTCNTGAGCCCCTATCCTTCCGCATAC  
CAAACAGATTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTNNTT  
CGCATCCTGTTTCGGTTCCTCTTGTAAACAACCAGATACGCTATNTGTGCGCAACGCCANCCTATAACGCACGTA  
ATCGGGATGGGTCTTGCCTTCGTCCCGATAGCNTAAATTTCTGAGGCCCCAGGCACTGCCTACAGATTACTA  
ATGATGGAGCTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCCAGTTCTTCGTGCC  
CGTTTTGGTTGGGTCTCCTCCATATCATTTATCTGGCGTCTCACGGTCTCGATGNAAGGCCCACTGCATCCA  
CTATCGCTTTTACGAGAGTAATCANTCGTTACACTATTGGGTTGGCGCGCNGCTTCTACCCTGGCTGCTCTCGT  
TTCCGGGGCTGTCCCTAATAGATNACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCANGCACTATGTCG  
TCAGATGTTAGGTTCCGGCTCGTAGTTTTACTCGCAACCNATCACGGGTCTTNNACCCTGCGTATCCTCCAAG  
GCGTTTTGGTGGGGCGNTGCGTTAGANCGAACGCTCCCNCTAAACCTCGAACACAAGCTAGTCTCTCCATT  
CTAGGCGCGGATTTACCCTGAGCTTTCAAGNGCTAATCCCGGGACTCCAACAGCATGAACTTGTTTTAGA

TGCGGGGTGCGACAATACCGAAGCCTTGAGCTAAACTGGNAATAAGATTANNGATCTTCCATCACGATTGGT  
CACTCGCATCGTTCGGTCTAAACACTATGCTGGTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTNCT  
TCCGCTTGGCGTGCCCCCTCTCGTTGCGTTTATTCTGGGTTCTGCGCTTCTCGTGCCCTNCTNGCGACAAC  
ACACACTNCGGCGCTCATTGCGGCGTGCCCTATGGNTCCGACGCCGCTACTTAAAAGTAGTNNATGTCT  
GATTTGTACCCAACGCCCTNGCCTGCCCTTGTAGCCGCTACTTAACTCTGNNGGCTGAGCAGCTGTGCGCC  
AGAGTTNGTACTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCNATTCACCAAATCCGCGATN  
ACTATTGAGTGTATCCTTAATCGTCACGCCGATGGTCCTGTAAAATATCGGGACCACCCGCCGATNTTATCG  
ATACCCGCACTGACATCAGTGCTTCCCTGTACGCCGAGTTTCTGCANAAAGCTTGAGATCGCCGTCNGATTT  
GCTCCCTACGNTAACGCGGAATACGAGCGACCAAATTAAGCCCTGACCAGAGNGGCTCCTTCCGTAGTCTCA  
CGACGATACCATATTATTATGCCTGGGCGCCTCGAGAGATAGCGTGACGTCACGCCAGCTCTTTGTAAAGC  
TCAATGAAAGGCATTNNGTNNTTCTAACCCAGGTNNCGGGACGACTGTCACAGAGTGATGGCCCCGCGCTTA  
CTAGCCNGCANAGCTAGTATCTGGGNTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTCACTNNGCCCCAC  
TGACGTTNTACGACGTTGTGACTCGTGGNTGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAA  
TGGAGGGGGTGCGAGCGCTCGGCCGACCAGGGCCACCCTCGCGGACCNGCTTTGTGCTGCGGCCTTCCCC  
CAATATCTTTCNATTGACCCTTGATTAATAAACCTCAGTGGTAGTGGTCCGATTCCCGGCCCTCACTCATGT  
ACGNGCTCTTGTCTCAGCGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCAAGT  
TTTGTACAGATCCGTTATGTNGAAATCCCCATTAATACACGTAACACTACTNNCTTACTGAGTTTCGACCGGCGG  
TCACGACGCTNACCCCCCGCGTCCGCACTTGAAGGTGGNGCATCCTCTACAGAGGCTCTTGTCTGGGGTT  
CCNTCCCTTACNATGAGTAAATGTACNATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGAT  
CTTAGCTGTGCCCTTCTTTCCACATCCCCAGATTACCAAANTCGCGNGCAGCTTCCCTNGNNNCNGGCGG  
ACAGAGAATGTCGGTTTTCTTACTCCCCTAGTGGGCGTATCGCGACCNTCAATCGGTATCCTCGGAGCCACG  
TATGACCGGGTCAAGATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAAC  
GTGCTGACAAAATTACCATTGCCCTTATTGTGACGNGGAGATCCAAATATGCGGGTNCCTTTACGCCGCTTTCT  
GTTGCTNCCCAGACTAGGTTANGAACCTATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGGCTNCCCTGCNA  
ACTATTGTAATGGCGAGCNATTAACCCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGA  
CACCGNNGGGGGACTNTATACGCGCCCCGCTGGGCCGTCGCCGGAGAGCGGATAGNNNCTCANANCCC  
TGCAGCCACGCNCGGTCACTACGCTCCCCNTTACAGCCCTCTCGTNAATGCTGGGGAGTCTCCTTTGACCC  
CGAGGGGTCCCAGCTANCTTACCCACNTTAANGCCATANCNNTGNGCCTTAAANCCGGGTATTTGTCCCC  
CCCCGANGTCTCGTTGCGGGATTCCCCGACCGCCACGTGNGGGATCCANNNNNACGTNGGCGTGTCTGC  
GCNCTTGGCCACCTGGACTNGAGTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTC  
TGACCCACACAGGGGAAGTCCNCCTCCGTACGGGAGAAGNACTATTTTCATGTTTCGCCGTACCCCTACGTCGA  
TCANNCTCGCCGGCTCTGCCAGCACACGTTGGCTAACCGCTCGAATTAAGNCNCTCCCTCCTTATCCCCCTC  
AGTCTCGAATCNCCNGGTATCATGTCTCTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATNAGC  
GGTGGCCCTNCATCACGGCCACCNTCGAGTGTACGCCGAGCGTGTTNCTGTATCATGCATGCTCCCCGCT  
CTCGCGGTGGCACGCGGAACCAATTTGTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACNCCCCTCA  
GTAAGACTCTCGCGCTTGTAGACGGNTAACAAATTTGACCCATCGCTGGGACCCTTNTTACTACAGTGATCCC  
AAAACCGNTTTTCTGATGACTCGTTTACTGTAGGCCTCCTTCTACCTGNGCTCCGACTCTTGANNAGTCTCC  
TATGCTACATNGTTNGTAGATAAACGAGTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCG  
CCATGTTCTGGCCATCCAGCTGGGATTAGTCGTGCCCGNAGGGCTTCTTNNCCGCCAGTGTTGGCCAGGG  
TGTTTTGTTCTGACCTCCATCCAGATCATTAGCCGNNACATTGAGTGGGACTCTCAACGCGCCAGGGGANCT  
TCTCCTATTTGGTGATACAGTCCGCANTCTACNCCAGGGTATTTGGACCATCAAGTCGNCGTCAAAAGAAAT  
ACCATAAACCCCCCAAGCGCCTGTGTGTAGTGGGCGCTGTTTTTAGTAGCTTCATATCGNCGTTCAGCGG  
GCACTACTAATGGTACCAGTCCCCGATCTAGCTGGGTAGTGTACTCGCCATAACCCCTNNNNGACATGAGCA  
CCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCGCTGGAAGACCATAACGACTCCATCGGCGGTGGC  
NGGCATGCCCCAGCGGCGTGTATTTGACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACC

GTCCCGTGGATTGGGCGGGCTAGTGGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGG  
CCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACT  
GGCAGCGATTTCTTTACTACAACAATCCGTTCCGCTCTGCTCCTAGTCTGCGNNTNNTNATCCTTATGCA  
CAGTANAAACGGCTGACTCAAGGTAGCATATCGAATANCCCTNCCTNAGCACAATTCGTANCATCATGACTTC  
TACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTCAGGTCCTACGCGCTCCNCGAGCAGTCAAGCGACC  
TAATTTACNGCCTATCGCTCGATGACACTCGCAGTGGACGTGCCCTTGCGCACGCCAGCGTACAAATCAACCG  
GCGCTTATTCCGTGCTACCTTACTCACAACATNACCATGAGNATCTGTTATTGGGGCCGGTCTGTNAGGCTGT  
TGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATCTTGGTACNTTACGTATNCCTGCNGTTAGAAA  
TTTTACAGCGGTTATAGGANTGACCGCTATTAAGCTTCTTCATACCACCTCCTACCCTCATATTGATCTCCCC  
CAGATGATTTCCCGCTGANTGTAGCTCGGGAACAGGTCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGA  
GGTTCGGCCTGGTCTTTCGCCGAGCTAAAGAAACCGNGAGCGGCAAATATTGCTTNGTATGTGACTGCG  
GGTGATGTCGCCATGGGGCGGCTAGTCGACTCTAGAATNACACGGCCGACGTTTTGGTGAACCGTTAAGG  
CGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCNAAACCTTGTGGTAGTCGGGNGNAGCATG  
CGGGCTGGACCGGCTACCAANCCTGGCACGTCACCTCACCCCGGNCGGCGTCTACGGCGATCGTCTACTG  
CCAGGTGCCGTACCGGCGGGGACACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGNTTTGGTGT  
ACACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATNACNTTCCGCTGGCCCCCATCTATCGGTAGTTG  
GTCCAGGGGGCTCCCATGATTACGTGTACGTGCCCCCTNGCCCATGTGCGATTTGGCTCCACCCGCTGTGG  
GCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTCGTT  
GCTCCCTCAGTCACCTTCTAGTCACTGAGTACGATATTTGGATAGTTCATAGGNATGTANANNCTACGCACC  
CGAGTTAGCAANNCTCAACCTTCTCCCCGTTTTTGGGCTCTAGATTTGGGGCNCCCCGTTCTGCGCGCT  
ATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTNCTTGGACTCCCTATTGTGTCACTNCG  
GGCCTTCTTATGGCTNCGTCCNGAGCGGCTNNCTACATCCATGGCGGTCCCTATACNTTAGTNGGATCCT  
GTTCTGCGCCTATACAGAAAGCTGGGGNACCAGGGATTNCACGGCAGCGNGAGGNGATGTCCNGGGGCA  
TGGAGATTATCCCTATCAGTGGGACATGGGATCAAAGAGCGATAGAAGTGAAGCGCAATTACAATACGTCTC  
TCACGTGTACTAACCTATAANTCAGGCTTGTACTGGTGAACGCTTCCGGTGCCGCGAGGAGTGTAGCGAG  
ATCGCATCAGGCCTGNNTTACGTTGCGCTGGCCGCCGGGTTTTTGGCAATTCTACGGGACGCACCCGGC  
GTTGTGACNGTTTGANCCCATGATGGGAAAGCACGGCCTAGCCTGACGNATCCAGTCGTCTAACC GGATTT  
TAGTTGCAAGTGGAAAGTGCCTGAGCACTTCTCTCTGAGTAGAGCCCATCAGTCCGATCANGTGCCG  
ATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGANATTGAGCGCTTAATCTATTCCACCTNTGCCGTGC  
ATGCTGTCCATATGCCACCAAACGNATNCAGGGTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTAT  
TCTTNTCCAATTTGCGTTTACGCTGCTGGCTAGTAAAGTGGCCTGCGAANGTCAGATGGGCCGGCCACTGN  
AACTAATGTCCTAATNCTGACGGTNGGGCTTCTCAGAGCCCAATGCACAGTGAGCCGTGTGTAGAGGGGAA  
CCCGGGGAGGGACGCGTGTCCACGTGNTCCATTTGGCATTGGGTGGTACGAAACCGCACTCGGCAANC  
GCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCCAGCACATGACATTCCGCCACAAGCNCTGCCAC  
TCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGNCCAGGTGCGAGTAGGTCCCGGTTTCGNATATGTTAACT  
TTGGAGCATGCTTTATTCGCACTCGGGTGGGGATCTTCTATACTCAATCTGAATCTTCTCTAAGCGAGNAT  
TACAGCGCTAGTGTATAATCACCTCCACGTTCCGCTCNGTACTCGTAATATGAACAGCCGGCGTGCGC  
CGTAAAGCTACACAAAAATNTATAGGGTATTCGNGAGCNNGTAACGACAGAACGAATACCGGCGAGGCTA  
GNCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTG  
CAATCCTCGTACCGAGAAGTCCGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTGGCGCCACNGAAGC  
CCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGGTCCTTTTGAGTCCGCCCGCGACNC  
CGTGGCGAGGATCCGAATTTGTCTCTGCTCTAAAAGGGTCCGCAACCGACGGNCTGACGCCGGGGGGGA  
TATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTNCGTTCAGGGCTCCGTACAGTTGGCGATNTC  
ANCTGTGCGAGGGGTTGAGGATTACTGAGCGNGGAGCCAGCGGNCCGACGANGGATCGGTGTGAGATNGA  
CGTTTATCGTGTGGAAAAGAGTAGGGTNCTAAGGGGGTCCACCGCGACAACGAGNCGACTGTGTGCGAGT

AGATCAGGCANNTGTNGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACATGTCACCATAG  
GCAACCCGCTTGTGTGGACGTANAAGCAGAAAGGGCGACGGGGACAGNAGATCGAACTCAGACTCGGACGC  
AAGCACAAGGTGTAGGGANTACATCTCGCTCGNGGGGCAAGTCGGATGANGTTGCCCCGAGACCAACGN  
NNCANTAATTTCCATAGNCAAACCTCCTCTTGAATCNGTACCGCTATTCTGGATAGGAAGGAAGTACGAACT  
AGACGGCCCCGTGTCAAAGACAGCGACNGACAGGAGNNGGNTGATCAGTAGCTACNGGGTACGCCTCTCA  
GACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACTGAAAGCGGG  
TGTCGAACGTATNGGCCGCTAGAGGATCTACGGCGTCGTCTATNNACTACCCCAACATAGCATGGTAAGCACT  
CAAATCCATTGCCATTGAAACGGCGGCTAAGTNGGGGGNTAGGCCTTNGNACGGTGTATGTGTACTGNGCC  
GCTTATCTGGGCGACTNNGNNTGCCAGAACCCCTAGTACGTNGGNGCAGCCTCCAGCGTTGNTATTTGTNA  
GCCGCATAGGAGGGGTCCGCGAGTCGGGCCGTATTNCCAACGACGCAGACNAAAAGAGGGGCTCGGGTAGAG  
CGCTGAACTTTGGGTCAGAAGANCNTCGTAACCCNTGTCAGCGCCATACCCCCAAAGAGTTCAATGACCCATG  
TAGACAAGTGGNGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGCCCTNCCACNTCGGGCGG  
AAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGNGTTCGCCCTGACTATCGACCCGCGTG  
CTACCAANNAGCATCCCGANNAATCATGTCCAGTATACCNTCCTTTGTTCTCTCTGGGTTGTGCGCTNGGT  
CGTAGGACGATGTCACGTTAATTGANATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGGACAAACA  
CACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAANAAAACGAGACC  
GGGCCCNACNGTTGTCGTGAAATGGACTTATACTCGACNACGCTGCGAGTACTACCGCTACGTGGCCATTTCC  
CCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGGCCTTCA  
AGTTGACNGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTCAGACG  
GCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAACCCGCT  
NTCGGGGACTAGAGAGAAATATATGCCTACGGTTNNATGCCTGGCTACGNATGCAGTGCAGAAAAAAGTA  
GCCGGGCCGGANGGAACACTTCANAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCACCAGCTGGA  
ACAGGGCTGGCAAATTACGAACATCNGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCTATCG  
CACATGGCCGNCTTACCATTATGTCACAAGGAGGATGTNAGACCCGAGGTGTAGCGAGCGAGCGGGAAT  
CGGATCGAATGAAAAAGCTGTNCATCNNGAAACACCGTCTTAAGAATCGAAATTGAGGGCNCTGACAGCCA  
TCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAGGT  
GTAGGANCGACAAGCCAANTGGGGCTTCGGNCATTGATGTGGCTGTTACAGCCNNGCCGTATACACTTAAGT  
TCAGATCGTGACCAAGAGCCCCGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCACGA  
ACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTNAGCGTACCCCNAGGGAAGGANCCGTAANTAACCA  
ACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGCCG  
ACCAATTGCCTTCNNGAGTGCCGCACCCGGTCTNCGCANTAGAGCATGTGGACNNNATGAACGACGAGA  
CCCCGTGAACTTCGGTAGCGCAGTAGACCTTTCCGNTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTG  
CAGAAGAGANCATNCCTGTATTAGTNAAGTNATTGGTGCATTAATACACCCGCGCTTAAAGTCAGCGGACCA  
AAAGATAGNGACCAAAGTAGGTTTGTACAGTTAATANTNCAACGCCNNAGCTGGATACGAAGCAACGCCTC  
TCGAAAATAGTGAGGTACNNGGGNAGNTGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTNNNGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGNGCAGGCTATCAGTTGAAGTTATAGGTGAGGCTCGNGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATNCCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGANACGCCAAGGNGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCGACG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGN  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCNTGAATCAGGTTGATGTCANAG  
TACCNGNAGACCNACCGAGGTCCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGT  
GACCTACAGCGAGAAGNTCGGNGGAATTTCCCGGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACC  
GCGAAGAGGGGTAGCGGACCAANGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAG  
TATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCC  
AGCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGA

AACCAGACCCCCAGTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGANGCCGTTCCG  
TTACNGCAGGGGGCACCATCTTCCCTAGCTTGCCCTGGCCANAGGAGAGGCTNTGGCGTCCAATTAGGTCTT  
ACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTTCGTTACGCCAGTGAATACCTNCAGACG  
GATTGCGCACGCTTTGTANCATGCCGTGCGCCAACAAGTGGAGCAAAACGGTAGGGCAGGAACAAAGNTAG  
CTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATG  
GGAGGATACGGGGGCCCTTGAATCNAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCANGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATT  
GCNGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
NAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTNTAAAAGCCATTATTT  
GGTANTCGCGACAGAGGAACTGTCTGGACCGACAGNNTGNCGAAAGGCAACAACAGGAAAANCTGGCGAA  
AAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGA  
AGGCGCAGAATAGTGTACAGGCCAGAAANCGAGTTACACGGGAGGGNATGGAGCNCAGANCATGGCTA  
TTATGAGGGATCCGCTCTCATTGGGACCCTCCTCANGTAATATTNNTGTGTGTGGCGAGACGGCCTTCTTCG  
GCACCAGAATTATTTGTTGTCGGACGTTAATCAGCCTNGTGAAGGCACGCGCTATCTAGNGGCTGGTAAGAN  
ACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGC  
GCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGNGGACAAACGAGGGTACAACGCCGCCGTATGAGAG  
CCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAG  
AAGTTGCTTGAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAG  
AGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAG  
CTGTGGTNCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGA  
GTATGAGGGTGGGACGGCAAGGNTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCA  
GCCTGCAAGCATTATGNGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGAC  
TTAATAGGCGGAGGTCCTGNNACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAA  
ATCCANNCTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGG  
CGTCAGTTGGGGAACAGCGTCGCTACCTGTATNNTNCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTAT  
CATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCNCCTA  
GCATTTGATTTTCTTGTAGGCACTTCGTAGTGGNTACTGATCGAAANGAACGAACTGAACGTGGACAAG  
AGAGATATGCNGACGAGACGAGAAGCGCTTNNCGTTGCAATTCGGCGAAAGGCGGTCATGATANTATATG  
GGGCGGGGTGAGGAAAATGTAGCNGGCTTCTCTGGGCTAGTTGCCNTTAGGCCGTGACTGTGATGAAATT  
GACGAAGCTCATNGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTTCGTTGAACGTGNTACCATAGACAC  
GCAGACANAGACACCCCATGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGNAGTGACTCTTCAGGT  
TCCAATNGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCT  
CCAAGTGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACNGACGATTGAGAAGTTTGGGAGGANNTC  
TTGGCATTCAAGCTATCTTATGCCNTACGAAGGATCTGGCCTGCATACGGATGGTGTCTNACAGCAATGTCC  
TAAGGCCNNGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCG  
CGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGAT  
TGTCACCATAAGCAGGNACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGNGACCCGGAGTTATCATCTA  
CCNNNCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTG  
GAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAANACTGGGAGA  
AGTCACGCTATCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAAC  
GCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCATGAGTAGCTCCGTCATAAC  
CCTTCGAAAGGGAGGAANTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCA  
GGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAGAGGT  
CATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGT  
GTGGCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGA

ATGTCACACGGAGCCGNGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGA  
GCCTCTGGCGACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTG  
TATTCTAGATGTAAAGGTCTGGAAGCTAGGGANNNAAGAATTGCACGTAGATGTAGGTACCNCCCCTGGT  
CCACAGGANACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAG  
CCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTCCGCGCTTTGCAACTGGGC  
ATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGNNACAAGGATCGTATG  
GACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGNTNCTATCACACAGTGCCTGCTTAACCGGTTNACGGAAG  
TTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAG  
TAGGGCCGTCTAGCCCTACTCATGGCCCAACNGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGN  
AGGAAATTTCTCGGGCGGTTACCTAAGGCTGACANTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGG  
AGTAGGGAANAAGTTTGCCGATTCTGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGT  
TNATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATNGTACCTGGTTAACT  
ACAGGTCCCTAATGCTTCTGNTCGCGGCATTTGTTGAGGGTTGTANGGTA AAAACCCAGGCAAAGAGAAACA  
ACGTAACGATCTGNTTNNANCTCTTGCTATACTGACAAATGACTCACCTTTGAAAAGTACGCGCGGAGGGATCC  
GCCCCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCNCCCAGATTCTAANTGTTGGAGGATACA  
CAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACNATTGGCCCCCAANGACCAATCTAGCTGGANTATA  
CCATTGATCGAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGG  
TCCGAGGCGGTCCAAACNTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGT  
GTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCC  
AATTTTTCGCAAGAAAGACTAAAGNTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGC  
CGACTGCGTGNAGCGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTT  
TCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCC  
GCATATTCTGAAGCCTATACGGATAGATNCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGG  
CAATCTACNTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGNNTATGA  
TACCTTACCCGGTCAAAAAGCGACAGACCCTCAGACANCGTCTAACCCAGACCCCAAGTGGAGTGGTACCCAGAT  
ACTGAATTGCCAGTTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGA  
CGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTANT  
TGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCC  
TCNNGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGNTCACTCTAGCNGAAGATAC  
CACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAANCTG  
ATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTA  
CTCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTT  
TCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTAA  
TCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACC  
TAACAGCAGACATTGTGCGGCTCCGACGGGCCGTACGGGAAAGAGGGGGACCNGCAGACGTTTGCCCGAGA  
GACCAGCAGTCTGNGATTGCGGACTCGTTTAGNAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGT  
CGAAAATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAG  
CGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCACCAAGGTT  
CGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCNTCNGCATCAAAGC  
CTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGANNTCNCTAGCTA  
TCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAAACTCGGAAGACGTGGTTTGTAGGGTAGCGT  
CAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCA  
ATTTGGCTTTCAAAGACGATACGTAGAGCTGAGNTGCTNNTTGTAAACCAAGTAACAACAAGAAAGCTACGCT  
GTATCCGAANACGACCTTACACGGTCCGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACG  
AAGTAGACGGCTCACTATTNGATGGGTGCCGGGGGGCGCGCTCACAACGGCGTGGNCTTTGGGCTGCTCTG

GACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAGCAACGACTTAGAGGAGCT  
CCCCCACTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGA  
AATCGCGAGGTGATAGTCAGTGCAGGAGGTGTAGTCTCAGGTGCCGGGCAANNCGCCGTAAAGTTTCT  
GTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGANACAAAGTGAGTGCCCGAACCA  
TGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAANGTCCAGTGGCACTGTAGTATGCGANCC  
ACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGGCGGCTCGGGGTCCCGACGCA  
TGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGNGGGCAGTTCATCGGCTA  
CCTAGCTCGTAACNTCGGATGTACACAATAGCGAATGGTGGGTGCGTCCTTCAGGCGAAGCATCGTGCTACCA  
GCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P11, London\_17, VIM-2, 10.09

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTACTCACACGAGTACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCATTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTGCGTGCACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGTGTGTCTGGATCTTT  
AGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCTCTTTCTTAAAGGAGGGGTTGGGCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCTC

CGATACGCAATGTAGGTGGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTCAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGGACTGGTGC GCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGC GAGTTCGGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGCGGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGTCCCTCTACTTCGCGGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTTCGGGAGGATTAGATACACGTTCCCTTGTAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGNCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACTACTATTGGGTTGGCGCGCAGCTTACCTGGCTGCTCTCGTTTCCGGGGCTGC  
CCTAATAGATGTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGACGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC GAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA



TCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTTCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCCTGGGCCCCGTCGCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTGGACCCCGAGGGGTCCCGACGTACCTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGTACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTTCATGTTTCGCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCAGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCGTGTCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTGCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTTTCG  
CTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTGCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGTCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCCGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTCA  
TACCACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGCAAAATATTGCTTTGTATGTGACTGCGGGTGTATGTCGCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTATTTACCATTTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAGAT

TTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCCTGCGGGCCCTTCTTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCACCGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCCTGTTGAAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGACTCGTAATATGA  
ACAGCCGGCGTGCGCCNTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGGAG  
TCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTGTGTTAAAAGGGTCGGCAACCGACGGACTG  
ACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTACGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTCGAACGGCGGCTAAGTAGGGGGTAGGCCTTCTGACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGCCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCTGATGACNATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTGCGTAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA

CCCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCANACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCA  
CGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAAGCTACCCCAAGGGAAGGAGCCGTAATAA  
CCAACAGTAGAAAAACGACCTAGTGGAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTAAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGTATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCGAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ATCCTGCCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGATCATGCCGTGCGCCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGGAAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGAATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGGCGAGACGGCCTTCTTCGGCATC  
AGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAAACTTTA  
GGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGT  
GCTGCGCAATTGCGGCTAGGAGAACCTCGTGGACAAACGAGGGTACAACGCCCGCGTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTGGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG

GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTCAACGCCGAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCNATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTAAGTGCATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGCTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGACCACGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTTGTTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTTCGAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCGGATGAGAGCCTCTGGC  
GACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCAT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAAACAACGTAACGATCT  
GGTTGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGANAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG

TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTGAATACAGCTATTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACCGGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGTTACCCCCCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAAGTGCAGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P56, London\_12, VIM-2, 07.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCAACGGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGCGCTTGTCCCACC

GCCCCTACTCGGTCGCCGGCTGGAAAGCTATATAGGTTGCCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTGTCTGCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCCGGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCTCTTTCTTTAAGGAGGGGTTGGGCCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCCTGCTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTGCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCCGTTAGTAATGGAGTGTCCGGTGCATTATTAGCACGCTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTTGGTTTTG

GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGGATT  
ACCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGGCTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCNC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGTAGCAGCGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGTGAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGTAGCGGTGGCCACGCGATCTACCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTTGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACCC  
GCTGGGTAAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTTGGGCCCTCCCCGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCCGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAGTCTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCATGTTCTGGCCATCCAGCTGGGATTAGTGTGTC  
CCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTACGCCGATA

CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTCACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTACGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTCTTTTCG  
CTGGAAGACCATAACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCATCCGCGTGTCT  
CATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCCC  
TGCCTTAGCACAATTTCGTAGCATCATGACTTCTACCCTCATTAACTGTTCCGAACATCCAATGATGCTTTTCAGGT  
CACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGTG  
CCCTTGCGCACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACCATGAGGA  
TCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGC GTGATATCTGTTAGCAATACATGGGGAGAATCT  
TTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCCTCA  
TACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACAGGTCAAGCTG  
TGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTGCTTTCCGCCGAGCTAAAGAAACCGGGAGC  
GGCAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAACA  
CGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCGG  
AAACCTTGTTGTTAGTCGGGAGAAGCATGCGGGTGGACCGGCTACCAAGCGTTGGCACGTCACCTCACCCC  
GGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAAC  
TGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACATT  
CCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC  
ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCCGTGCTCCCTCAGTCACCCCTTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAANCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGTTTTTTGGGCTCTAGA  
TTTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGAGCATAACGATAATCTTTTCAAGGCTTTTT  
ACTTGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGG  
CGGTCCCTATACCTTAGTCGGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGAAC  
TGAGCGGAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCACTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCCGCGCGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCATACGTTCCCGATATTGAGCGCTTTAAT  
CTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCCGGCACTGCAACTAATGTCCTAATCCTGACGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACATTC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCTGAATC  
TTCTCTAAGCGAGGATTACAGCGCTAGTGATAATCACCTCCACGTTCTGCCTCGCTCCGACTCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG



GCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGG  
TCCGCCCCGCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCACCGCGACAACGAGGCGA  
CTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCGAGTCGGGCCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACATCATACTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAG  
GTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTAA  
GTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCAC  
GAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAAC  
CAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGC  
CGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGAG  
ACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGT  
GCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTGCATTAATACACCGCCGCTTTAAGTCAGCGGACCA  
AAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCTC  
TCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCTCTTAGGAATCGCGGGTGATGCC  
CTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTA  
GGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAA  
TTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCACGG  
AGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACGAGAGGGTGGG  
ACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGT

ACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTGA  
CCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGC  
GAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTA  
TGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGAAAAGAA  
ACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTTCGT  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAACGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTCAAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTATGAGAGCCACG  
GGGGAATCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGCAGCATTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCGCAACCTGACGAATAAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACNAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGCTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGNAATGGAATACATTCGCGGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA

AGGACCTGGCAACCAATANCTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTACGTCATAACCCTTCGAAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGAAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCTCCGGATGAGAGCCTCTGGC  
GACGCCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTNNCAATGACTCACCTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAG  
AAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAG  
GACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCA  
AATAACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGT  
CCAAACGTCTCCCTTCGTGGTAACTGTACCCAGGATCCTTCTCCCTCGTAATGAGGAGTGTGGGTGGAG  
ACAGTAGGCAATCAACGCGCTTACAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCA  
AGAAAGACTAAAGGTCGAGCAGGCGCTGGGAAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
CTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTAAGAACTGATTACAGCTATTTTTCATGGAGCCG  
CTCAATAGCGGGCTTTCCTTAACGGGTGAACTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGA  
AGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCT  
ATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGCCAGAAGGGAAGGGACGTTATGATACCTTACCCGG  
TCAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCCAAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
ATCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTCTGCCTGGATGC  
GAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGTTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAA  
CCAGGTCAAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC

CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGNTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGNGCAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCGAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P64, East of England\_6, 01.14

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCNGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTCTACCCGACTATCTATTCTGCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGN  
TTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTCTCCCCATAAACTCTCCAACGGGCCTTGAGTGAAC  
AGAGTGAATTCTTCTGGGGGNTTGTGTTGTGTGCCTTTGCGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCA  
CCGCCCTACTCGGTGCGCGCTGGAAAGCTATATAGGTTGTCCTCCGCACCACTGGCGCCCCGCCGCATGA  
TCAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCC  
GGTNAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTACATTGGTATGTTGGCACGCATGGTC  
CTGTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGNAGGAAT  
GTGCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCT  
AAGTAAGTCGTTAGGGCGGCAGAGGAGCACCCCTATCGTCTGCGTGCAGACTGCCTTTGAGTCGCGCACTG  
CCTCAGTTTTGNACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTAT  
GCCCTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGG  
TTCTGGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGG  
ACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGC  
ATTGGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAA  
TGTGTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCT  
GCTCGTATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAAT  
CCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGNGAGATACCCCATCGGGGGTTGATCATAATTGCGT  
GGGCGGACTCGCCCTTACAGTGAAGAAGGCAGGGTCNTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTG  
TCTACACTATCGCTGTTGCCGACTAGACCGGTGGNTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACT  
TGTTTTACCACTTACTCACTTTTGTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGA  
TCTTTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAG  
CCCCAGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCNACGCATAGTCGTTGGATACC  
CAGCCGATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTT

AACCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGA  
GCTAGGATCTCGCCTCGACGTATTGAACTCCNATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAG  
GACTATTTGTGGACATTGCGGCTCTGCGTTTTGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGT  
TGCTCGTACCCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGA  
CCAGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCNGCCTGTTTTACCCTCCTCCCGCT  
ATCCTCGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATNCGCCTGCGTCCCCCTTATACATCGC  
CACGAGAGGCCGGTTGATTCAGTATCCAAGCTCTTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTTGCCT  
TTGCGGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCGGTGCGAGTTCCCGTCCGTGAC  
TCACGACCANTTTTTCGGCCCTCTTTCTGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTGCGTTTGT  
AGTGTATCACGCCNCGCATGGACTAACTTCGTAACCTCATCCGACCGTCCGGGGACACCTCATGTTCTCGC  
CATATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTNAGCTAGTATCCCGG  
TGACGATNCATATAANAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCG  
AGGAGTGGCCTTGTACTAGGGCGCCCACTCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGC  
TCCTCCTCGCAGGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAG  
GTACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCNTTTCAGTAGCCCCCAGC  
TCCCTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAG  
TTAGCTTACCGAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCAT  
TACGCGCTGTGCTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACC  
ACCGACCTACCGCACAGGGGACTATTCAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTT  
GTCTACCTCGATATAATAACANNGGGCCGGTAGTCAATTCTCCATACCGCCAAATCGTCATTTAGCTTTGCTA  
ACTTATAAAGGTGCGTGTTCCGGGAGGATTAGATACACGTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAAC  
AGATTAGTCACCATTGATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCCTCCTGGTTCGCAT  
CCTGTTTCGNCTCCTTGTAAACAACCAGATANGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGG  
GATGGGTCCCTTGCCTTCGTCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGNT  
GGAGCTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTT  
TGGTTTGGGTCTCCTTCCATATCATNTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATC  
GCTTTTACGAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCNCGTTTCCG  
GGGCTATCCCTAATAGATGTAAGTGCATCAGAGTGTCTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGA  
TGTTAGGTTCCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTT  
CGGTGGGGCGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCTNTTCTAGGC  
GCNCGATTTACCCTTGGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGNATGAACTGTTTTAGATGCGGG  
GTGCGACAATACNGAAGCCTTGGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGC  
ATCGTTCGGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCT  
TGCGGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTNCTCGTGCCCTTCTCGCGACAACACACT  
CCGGCGCTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGCTNCTTAAAAGTAGGTCAATGTCTGATTTGTA  
CCCAACGCCCTAGCCTGCCCTTTGTAGCCGTCACTTAAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGT  
ACTGGTGAAGTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGT  
GTATCCTTAATCGTACGCGGATGGTCTGTAAAATATCGGGACCACCCGCCGCATCTTATCGATACCCGCAC  
TGACATCAGTGCTTCCCCTGTACGACGAGTTTCTGCACAAAGCTTGAGATCGCCGTGCGATTTGCTCCCTACGG  
TAACGCGGCAATACGANCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACNACGATACCA  
TATTATTATGCCTGGGCGCCNCGAGAGATAGCGTGCAAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGG  
CATTNNGTGATTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGNCCCCGGCCTTACTAGCCTGCATA  
GCTAGTATCTGGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCACTGACGTTTTACGA  
CGGTTGTACTCGTGGATGCCTATCGTTTTTTCTTCATANGTAAACATAGGATTGTCAATGGAGGGGGTGC  
GAGCGCTCGGCCGACCNGNCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAANNTCTTCTC

CATTGACCCTTGATTA AAAACCCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTT  
GCTCAGCGATGCTATTCTNCGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATC  
CGTTATGTCGAAATCCCCATTAATACACGTA AACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTT  
ACNCCCCGCCGTCGCCACTTGAAGGTGGCGCATCTCTACAGAGGCTCTTGTCTGGGGTTCCCTCCCTTACT  
ATGAGTAAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCC  
TTCTCTTCCACATCCCCAGATTACCAANTTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGG  
TTTCCTTACTCCCCTAGTGGGNGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTNTGACCGGGTCAA  
GATAAATTTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGNAAACGTGCTGACAAAATT  
ACCATTGCCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCCAGAC  
TAGGTTAGGAACCTATCCAGTACCTTCCGTA AACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATAGCG  
AGCACATTA AACCGCTGGGTAAGGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGA  
CTTTATACGCGCCCCGCTGGGCCNNTCCCCGAGAGCGGATAGCTNCTATAACCCTGCAGCCATGCGGCG  
GTCACTACGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGT  
ACCTNACCNACCTTAAGGCCATAGCTGTGCGCCTTAANTCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCG  
GGGATCCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCCANCTGGA  
CTTGAGTCACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGT  
CCTCCTCCGTACGGGAGAAGAACTATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCC  
CAGCACACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCTCTCCAGTCTCGANTCTCCGGTCCAT  
CATGTCCTCTCGACCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCAC  
CCANCGAGTGTGACCCGGAGCGTGTTCCTGTATCATGCATGCTCCCGCTCTGCGGTGGCACGCGNAACCA  
ATTTTGTCCGGACAACACTCAAAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCNTGTAGA  
CGGGTAACAATTTGANCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGTTTTTCNNATGACTC  
GTTTGACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATA  
AACGAGTCAAGTCCGAGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGCGCCATCCAGC  
TGGGNTTAGTCTGCGCCGTGAGGCTTCTTTCCCGCNGTGTGGCCAGGGTNTTTTGTCTGACCTCCATCCAG  
ATCATTAGCCGATACATTGAGTGGGACTCTCAACGCGCCANGGACCTTCTCCTATTTGGTGATACGGTCCG  
CAGTCTACTCCAGGGTATTTGNACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCCAAGCNCCT  
GTGTGTAGTGGGCGCTCTGTTTTAGTAGCTTCATATCGTCTGTTAGCGGGCACTACTAATGGTACCAGTCCCCG  
CATCTAGCTGGGTAGTGTANNCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTT  
TCTAATTCTTTTTCGCTGGAAGACCATAACGAGCTCCATCGCGGGTGGCTGGCATGCCCCAGCGGCGTGTTA  
TTTGTACTCCTGAGCAGCNGTAGAAGGTGTGCGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAG  
TGCTTACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGNNNCTGAT  
GGTCCATCCGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAAC  
AATCCGNTCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGT  
AGCATATCGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACNTCTACCCTATTA ACTGTTCCGAACATC  
CAATGATGCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGAC  
ACTCGCAGTGGACGTGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCAC  
NACATCACCATGAGGATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAA  
TACATGGGGAGAATCTTTGGTACTTTACGTATTCCTGNTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCG  
CTANTAAGCTTCTNCATAACCACCTCCTACCCTNATNTTGATCTCCCCAGATGATTTCCCGCTGATTGTGGCTC  
GGGAACAGGTCAAGCTGTAAGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTNGTGCTCTTCGCCGAGC  
TAAAGAAACCGGGAGCGGCANAATATTGCTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGNCTAGT  
CGACTCCTAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCAT  
ACAACAACGGTCCCGGAAACCTTGNNGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTG  
GCAGTCACTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACT

CTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTTATTTAC  
CATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTG  
TACGTGCCCCCTCGCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATNAGCCTAGANCCG  
AACACCTACAAAGAAGGAACCACCGCAAGTTNCGTGACGGTCCGTGCTCCCTCAGTCACCCTTCTAGTCACTG  
AGTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCC  
GCTTTTTGGGCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATA  
ATCTTTTCAAGGCTTTTTACTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCTGAGCGC  
GCTGTCTACATCCATGGCGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATAACAGAAAGCTGGGGGCA  
CCAGGGATTGCACGGCANC GCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGA  
TCGAAGAGCGATAGNACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCNTTGT  
CACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGG  
CCGCCGGCGNTTTTTGCGAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAG  
CACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCTGTGAGCAC  
TTCTCTCCTGAGTAGAGCCCATCAGTCNGATNACGTGCCGATCTGAATCNTGGCTAGACGCGCCCATNNGTTC  
CCGATATTGAGCGCTTAATCTATTCCNCCTNTNCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGNG  
TTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATNTGCGTTTCAGCGTGCTGGCTA  
GTAAAGTGGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTC  
AGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATT  
TGGCATTGGGTGGTACGNAACCGCACTNCCGANGCGCAGCTCTTGTACGGTGGGAAGGTNGCAAGAG  
ACAGTTCAGCACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAA  
GACCAGGTGCGAGTAGGTCCCGGTTGCAATATGTTAACTTTGGNGCATGCTTTATTAGCACTCGNGTTGGGG  
ATCTTTCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCAGTTCTG  
CCTCGCTCCGTA CTGTAATATGAANAGCCGGCGTGCTCCGTAAGCTANACAAAAATCTATAGGGTATNCGC  
CGAGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTA CTCAACTNCCGCA  
AGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACNGT  
ATGGGGTCAGNACGCCGATAGTGGCGCCANTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTAT  
CAACAGCCGACGGGTCTTTTGTAGTCCGCCCCGACACCCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAA  
AAGGGTCCGNCACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCNTTCAATG  
GGCTCTCTCGTTCAGGGTCCGTANAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGG  
AGCCAGCGGCCNGACGACGGATCGGTGTGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGG  
GGTTCACCGGACAAACNAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCC  
CCAAGGCTCTCGGCGAGTGTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGC  
GACGGGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGG  
GCAAGTCGGATGAGGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATCTG  
TACCGCTATTCTGGATAGNAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACANCGACAGACAGGAG  
CTGGNTGATCANTAGCTACCGGTACGCCTCTCAGACTATNNGGGGGTAGGGGGCCTATTAGATGAGGCCCT  
CACGTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCG  
TCTATACTACCCCAACATAGCATGGTNNGCACTCAAATCCATTGCCATTGCAACGNCGGCTAAGTNGGGG  
GCTAGGCCTTCGTACGNTGTATGTGTACTGGGNCGCTTATCTGGNGACTAGGAATGCCANAACCCCTAGT  
ACGTGGGCGCAGCCTCCNGCGTTGCTATTTGTTAGCCGCATAGGAGGGTCCGCAGTCGGGCCCCGATTACC  
AACGACGCAGACCAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTC  
AGTGCCATACCCCTAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTNGTGTA  
CNATTCACAAAGAGCCCTACCCACATCGGGCGGAAGCAGNCTTGAACCAACTTCACTGGGAACCAGAAAGCA  
CGCGTGCGTTCGCCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACC  
CTCCTTTGTTCTCTCTGGGTTGTGCGCTTGGTCTGATAGGACGATGTCACGTTAATTGAAATCGATATCTCGAAC

CCAGGCGACCGGGCAATACAGGAGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCT  
ACTTGCCNGATGTCATATAATAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAC  
GCTGCGAGTACTACCGCTACGTGGCNCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACNAACG  
TTCTACGAAAGAGTCCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGTCCGGCGGTTGGCTACTAGAGGAC  
CATGCAAGGCNATCGGAGTCCNCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGNATAGCAGG  
AGCTTAACTGTCCCGATTCAAAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCC  
TGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGGACNGTGACC  
GTACCGTCATCAATAATCCCACCAGNTGGAACAGGGGCTGGCAAATNACGAACATCAGTGTAAGGAGCCTAAT  
TAAGGCCAACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGA  
CCCNGAGGTGTAGCGAGCGNGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAA  
GAATCGNAAATTGAGGGCGCTGACAGCCATCCACTGCCGNGNCAAGTGTACGTACATACCTACCAAGCGGTCC  
CAAGTAGCCTAANGGCGGGGATAATAGGTGNAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGANGTG  
GCTGTTACAGCCTGGCCGTATACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGNCGA  
ACCCAATCCAATAAATATTTAACGCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCG  
TACCCCAAGGGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTG  
ACAAGGGGAAAAAGCGAGCGTCTCCGCCGACCAATTGCCTTCGCGAGCGCCGCACCCGGTCTGCGCATTAG  
AGCATGTGGACCCGAATGAACGACGAGACCCCGTGAAGTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCA  
TCTGTCCGACCAGAAGGCGCTTCGATGTGCAGAAGAGATCATNCCTGTATTAGTGAAGTAATTGGTTCGATTAA  
TACACCNCCTTTAAGTCAGCGGACCAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAAC  
GCCAGNGCTGGATACGAAGTAACGCCTCTCGAGAATNGTGAGGTACGCGGNGAGATGTCTCAAGTCCGGGG  
GGGCGTCTTAGGANTCGCGGTGATGCCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGT  
TGAAGTTATAGTTCAGGCTCGGGCCGTANGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCG  
GTGAGGAGCGCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGC  
CCTATCCTACCAATGAGGAGTGCAGCGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAG  
TGGGGTAAAAACANGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGC  
NGTCCATGAATCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACA  
GTGCCGCCAGGGNTCCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTA  
GGAGCGGTTTCTCCGGACACGAANCNGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGGATGNTCAAG  
AGACTCCGANTGACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTNAGGGGCACGCAGAAGTTGGC  
GAGGACCTTGTGTGTTACGGTGGTGGCCAGCTGAGGTTTCGCGATNTAACCCGACTATACTAAGAACCGCTCT  
GGACTGACCAAGAAGGCGACGCAAAAGAAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCANTAA  
NGAAATACGGACGAATCCGATGCCGTTCTGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCTGGCCATA  
GGAGAGGCTATGGCGTCCAATTAGTCTTACACCCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCG  
TTCGTTACGCCAGTGAATANCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGCGGAGC  
AAAACGGTAGGCNAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTNTAGNGTCTGGAAGGGGTGACGA  
GAATATGGGGGTAGGCAAACATCGGATGGGAGGATACGGGGGCCCTTGAATCNAAGAAGGGAGTGGGG  
AGTATAGTAAGAAACCTATGTCATGGNCGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAA  
ACAGCCCTAAGGGCCAAGCTGCCGNATTGCCGCTGCTAGGCGTAAGTGCGGCGGAAGGTGTCTTAACGTTGC  
AAGGNACCTGAGCGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGCGTACGNTCAGTGAATCAATACC  
CCTAAGACCNATTTTAAAAGCCATTATTTGNTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGA  
AAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAA  
CGAAAAGTATCAGCAGGCAAGAAATGAAGGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGG  
AGGGAATGGAGCCGAGAACATGGCTATTATGAGGGATCCGCTCTCATTGGGACCTCCTCATGTAANATCAG  
TGTGTGTGGCGAGACGGCCTTNTTCGGCATCAGAATTATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCA  
CGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCG



GAGTCTGATGGGACAATNCATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGA  
GGGTACAACGCCGCCGTATGAGAGCCACGGGGGAATCCTCGCCTGCGTGTGTGNGCGGGTGGTTCCATCC  
CNAACGCCACGTAGCAGAGCAAGAAGTTGCTTGTAAACGACTTGACCGATGAGGAGAGTTCAATTGACCAG  
TATGATGCCACAGCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGC  
GCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGNTTGTGCGCA  
CGCATTTAGATTTGCTGCCAAGAGTATNAGGGTGGGACGGCAANGTTAGGGTCGTTAAAGTGTCAACGCC  
GAACCTGACGAATAAAACGGCAGCCTNCAAGCATTATGANATGGACAGCTCCCGGCGCTGCGACCTCTGCGG  
CCAGGCATTACCCGGTGAGGACTTTAATAGGCGGAGTCTGCCACTACTTAACGCAGGATACGATTGGAG  
GGCGGAANNCTCCCGTTATAAAATCCANGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCG  
GCAACCGTAATCCCGACAGCGCGCTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGT  
GGGGATCGGCCGAACCTGACTATCATGCGAGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGA  
TTCTGCACCAGGGCTTGCGCCTAGCATTGATTTCTTTGCTTAGGCACTTCGTAGTGGGACTGATTGAAACG  
AACGAAACTGAACGTGGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGA  
AAGGCGGTCANGATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGNCTTCTCTGGGCTAGTNGCCCTT  
AGGCCGTGACTGTGATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGNCAGGTTCCG  
TTGAACGTGGTACCATAGACACGCAGACAAAGACACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTG  
CATACGCAGTGACTCTCAGGTTCCAATGGCTGCACATGTATAATTGAAAGAACGTAGTTCCAGGGAAACNG  
CNAGAAAACCAGTACCCCGCTCCAAGTGCAGCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGAT  
TCAGAAGTTTGGGAGGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGA  
TGGTGTCTAACAGCAATGTCCTAAGGCCAGTGGCATTAAAAATNTCTCGACCGGGTGGGCNGAGAAAGAGT  
GAGAAATGGAATACATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCNTAGTTTAGGCAGACGCAAGGA  
CCACGGGGGCATGGAAGANTGTCACCATAAGCAGGGAAGTNGTGGTGTTAGGTAGCGAGGGCCCAAAGGA  
GGGACCCGGAGTTATCATCTACCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCA  
GAGCATCTCAGAAGACGGTGGAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGC  
ACGAAGGAAGACTGGGAGAAGTCACGCTATCAGGAACTATGTACGTATACAGGGGCGTGGGCCTAAGAACG  
AGCCAGGATGGGACTCAACNCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCC  
CATGAGTAGCTCCGTCATAACCCTTCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATG  
GGACCTAAACTCAGTTAGCAGGAGGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTA  
GCCCTGCGCGTAAAAGGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCA  
CCTTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCCACCAGNCTAAAGGAGGAACGGGCAATGGCCG  
AGGCACGTTGGGAGTAAGAATGTCACACGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAAAGGATATGT  
ATGCCACTCCCCGATGAGAGCCTCTGGCGACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGC  
CTGATTGGTAACGGAGCCCGTATTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGA  
TGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCCGAGCGGTCGTAGTTGTGACGGGGAGGCCA  
CGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGT  
TCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCAAGTCAAGGTCTCTGCCGACATGAGACCGGGGAAC  
GAGATAAAGGATCGTATGGACCCTCAAGCNCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCT  
GCTTAACCGGTGACGGAAGTTAAAGTCTCTGACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTAC  
ACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCTCCTCNCGTACGAGGCTAA  
TCGCACCCCTGCGCACCGAAGGANATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATT  
GCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGA  
GGCAAAGCACCTTTGTGTTAATGTGACGAGGTGNAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGT  
GATGGTACCTGGTTAAACTACAGGTCCTAATGCTTCTGCTCGCAGCATTTGTTGAGGGTTGTATGGNAANAA  
CCCAGGCAAAGAGAAACAACGTAACGATCTGGTTGGAGNTCTTGCTATACTGACAAATGACTCACCTTTGAAA  
GTACGCGCGGAGGGATCCGCCCCCTAAGAAAAGCGANACCTCGAGTGTAGGTGGTGCATCCACCCAGATTC

TAAGTGTGGAGGNTACACAGGTCCGAAGGACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGAC  
CAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGAT  
GGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCNGGATCCTTCTC  
CCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGNAATCAACGCGCTTCAGANAACGGTCTGCGTTGGA  
GTAATAAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGGTAGC  
GCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAA  
GAACTGATTACAGCTATTTTTTCATGAAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGC  
TACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCG  
ACTACATCATAAATCCAAGGCAATCTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAA  
GGGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACANACCCTCAGACAACGTCTNACCACGACCCC  
AGTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGA  
GCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACCCCT  
GTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGC  
AGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTG  
TCACTCTAGCTGAAGATACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACT  
ACGTTGATGCTCCAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGG  
GACGGAACGAAAAATCTACTCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCG  
CACTTTTGTATTACGATCTTTCTGCCTGGATGCGAGNCCGATAGTTGTCTGCGTTAGCTACTCAGAGGTGAGT  
TCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTCATGGTAGGACGANATGGGAGG  
AAAAGTATGCCTATAACACCTAACAGCAGACATTGTGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGAC  
CAGCAGACGTTTGGCCGAGAGACCAGCAGGTGCTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCA  
GAGCCCTAATGAGGCGGTGTGCGAAAATACTCTCATGTAAAGAAGAGGTCTTGACACGTTTTGAGGGTTACG  
ATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTA  
GGGTACAGAGTCACCAAGGTTTCGGATCAGGCAACCAGGTCAAAGNCGTCTACGGGCGCCCATGGGTAAGC  
GGTAATCCGCCAGCATCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTC  
CTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAG  
ACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAG  
CACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAA  
GTAACAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCCGTGTGTAGCAGGAGGTTGCGAGG  
TCTTGTGATGAGGCTGNGAACGAAGTAGACGGCTCACTATTGATGGGTGCCGGGGGGCGCGCTCACAACG  
GCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTC  
TAAGNAACGACTTAGAGNGTCCCGCACTTACTGGCCGACTATACGGACGAGACACAATTCTCCCTTCTAC  
CGTATAAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCG  
GGCAAGTCGCCGTAAAGTTTCTGTCGGACAAAGAGCGGGCAGTGATATCCGTCCCCAACAAAGGCGAGGAA  
ACAAAGTGAGTGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGT  
GGCACTGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCGTAAAATTAAGTG  
GCGGCTCGGGGTCCCACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCAC  
ACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACGTCCGGATGTACACAATAGCGAATGGTGGGTCCGTCCT  
CAGGCGAAGCATCGTGCTACCAGCCCGGATAAGATAACCCGCAAAGAGTGCATAAAG

>P8\_2, London\_17, VIM-2, 07.13

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA

GACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTCACTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTCCGGCCTTGCCCACC  
GCCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTCCGCACCACTGGCGCCTCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAACCTCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCATCGCGTGCAGACTGCCTTGTAGTCGCGCACTGCCT  
CAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCTTATGAGAGACCGACTAGTATGCC  
TATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCTG  
GCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACAC  
ATGCATTACTTGTACAATAACGTCTGCGTAACAAGGGGAATCCACTTCCCTATTGCCGATTGGTGCATTG  
GAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGTG  
TGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTCG  
TATGGACATTTCTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGCT  
CGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGTTGATCATAATTGCGTGGGC  
GCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCTAC  
ACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGTTT  
TACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTATAGCCCCGCGCTGCTGTCCTGGATCTTTA  
GATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCAC  
GTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATAACCCAGCCG  
ATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCTA  
ACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAGG  
ATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTAT  
TTGTGGACATTGCGGCTCTGCGTTTTGCTCACCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTCG  
TCACCACATTATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACCAGCC  
GCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCTCG  
ATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGAGA  
GGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGTTTTGCTTTGCGGG  
AACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCGTGACTCACGAA  
CATTTTTTCGGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGTTA  
TCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATATGA  
TCTCCCGCATATTAACACTCCTCNGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACGAT  
CCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTGCGAGGAGTG  
GCCTTGTACTAGGGCGCCCACTCCCAGCTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCTC  
GCAGGTAATCTCTTTCGGTAGTAATGGAGTGTCCGGTGCAGATTATTAGCACGCTTACTTACGGAGGTACCCG  
TGCTGAGCGCTAGGCACGGTCTGGCCATCGCAACCTGCAAAATATGCCTTTCAGTAGCCCCCAGCTCCCTGA  
GACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACACCAGGCCGAGCGGTCCAAAGAGTTAGCTT  
ACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA

AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCTGGTTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTTCAGCTAAATTATCACCCCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCTGC  
CCTAATAGATGTAAGTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTAAACCCTGCGTATCCTCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGTGCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTACACTGTGCCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTACATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAATAAACCCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTAATACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTNCCTTACGCCGCTTCTGTTCTGTCGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCAGAAAGTGTGTTGCGGGCGCTCGACACCGCGGGGGGACTTTATACGCGCC  
CCGCTTGGGCCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGGTCCCGACGTACCTTACCCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAATAATTTTCATGTTTCCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCTCCCTCCTTATCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTTCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA

ACACTCAAAAAGTCGTGTCGGGGTCACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTTCCCGCAGTGTTGGCCAGGGTGTGTTTGTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGGG  
TATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC  
TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTCG  
CTGGAAGACCATAAGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGCA  
GCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCG  
TTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCCGCCGCTGATGGTCCATCCGCGTGCT  
CATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTGC  
TCCTCCNNNNNNNGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATC  
CCTGCCTTAGACAATTTCGTAGCATCATGACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGCTTTTACG  
GTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACTACTCACAGTGGACG  
TGCCCTTGCACGACGCCAGCGTACAAATCAACCGGCGCTTATCCGTGCTACCTTACTACAACATCACCATGAG  
GATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAAT  
CTTTGGTACTTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGCTATTAAGCTTCTT  
CATAACCTCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGTGAACNNNNNNNN  
NNNNGGGNN  
NNNNNNNNNNNNNGNNNNNNNNNNNNNNNNNNNNNGTANNNNNNNNNNNNNGTNNNCNNNNNNNGCGCN  
NNTCNNNNNNNTAGAATAACACGCGCCGACGTTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTC  
CCATTACAACAACGGTCCCGGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGC  
GTTGGCACGTCACCTACCCCGTTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGA  
CACTCTGCCGAGTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGCTACTCTGTGTACCAGGGGGTTAT  
TTACCATTTGTCCAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTA  
CGTGACTGTCGCCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGAC  
CCGAACACCTACAAAGAAGGAACCACCGCAAGTTGCGTGACGGTGGTGTCCCTCAGTACCCTTCTAGTCA  
CTGAGTACGATATTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTC  
CCCGCTTNTTGGGCTCTAGATTTGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTTGAGCATAACG  
ATAATCTTTTTCGAGGCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTTATGGCTCCGGTCTGAG  
CGCGCTGTCTACATCCATGNCGGTCCCTATACCTTAGTCGGATCTGTTCTGTTGGCCTATAACAGAAAGCTGGGG  
GCACCAGGGATTGCACGGCAGCGGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATG  
GGATCGAAGAGCGATAGAAGTGAAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTT  
TGTCACTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGC  
TGGCCGCCGCGGTTTTTTCGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGA  
AAGCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAG  
CACTTCTCTCCTGAGTAGAGCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGT  
TCCCATATTGAGCGCTTAACTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGG  
GTTCTGCGCTGCGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTA  
GTAAAGTGGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCTGACGGTTGGGCTTCTC  
AGAGCCCAATGCACAGTGAAGCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCNTGTCCACGTGCTCCATT  
TGGCATTGGGTGGTACGAAACCGCACTCGGCAAGCGCAGCTCTCTTGTACGGCTGGGAAGGTTGCAAGAGA  
CAGTTCCAGCACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAG

ACCAGGTGCGAGTAGGTCCCGTTNGAATATGTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGAT  
CTTTCTATACTCAATCTGAATCTTCTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCC  
TCGCTCCGTAICTGTAATATGAACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCG  
AGCAAGTAACGACAGAACGAATACCGGCGAGGCTAGTCATCTGTCTACTATCCTGTACTCAACTCAGCCGAAG  
ACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTAT  
GGGGTCAGAACGCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCA  
ACAGCCGACGGGTCTTTTGTAGTCCGCCCGGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAA  
GGGTGCGCAACCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGG  
CTCTCTCGTTCAGGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGTTGAGGATTACTGAGCGCGGAGC  
CAGCGGCCCGACGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGT  
TCCACCGCGACAACGAGGCGACTGTGTGCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCA  
AGGCTCTCGGCGCAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGAC  
GGGACAGCAGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCAGGGGGCA  
AGTCGGATGAGGTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTAC  
CGCTATTCTGGATAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTG  
GATGATCAGTAGCTACCGGGTACGCCTCTCAGACTATGGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCAC  
GTCTCCCTAGTCTACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTA  
TACACTACCCCAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTA  
GGCCTTCGTACGGTGTATGTGTACTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTG  
GGCGCAGCCTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGA  
CGCAGACCAAAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTGAGAAGATCGTCGTAACCCCTGTACAGCGC  
CATACCCCAAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTC  
ACAAAGAGCCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACAGAAAGCACGCGTG  
CGCTCGCCCTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTT  
GTTCTCTCTGGGTTGTGCGCTTGGTGTAGGACGATGTCACGTTAATTGAAATCGATATCTGAAACCCAGGC  
GACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCC  
CGATGTCATATAATAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGA  
GTACTACCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGCTGGGGGTAGTGGCACGAACGTTCTACG  
AAAGAGTCCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGTCCGGCGGTTGGCTACTAGAGGACCATGCA  
AGGCGATCGGAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAA  
CTGTCCCGATTCAAAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTAC  
GAATGCAGTGCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGT  
CATCAATAATCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCG  
AACGCAGGTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAG  
GTGTAGCGAGCGAGCGGGAATCGGATCGAATGAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGC  
AAATTGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAG  
CCTAACGGCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACA  
GCCTGGCCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCC  
AACTAAATATTTAACGCCACGAACCGCTTCAAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAG  
GGAAGGAGCCGTAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGG  
AAAAAGCGAGCGTCTCCGCCGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGG  
ACCCGAATGAACGACGAGACCCCGTGAACCTCGGTAGCGCAGTAGACCTTTCCGGTGGCGCCATCTGTCCGAC  
CAGAAGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCG  
CTTTAAGTCAGCGGACCAAAAGATAGGGACCAAGTAGGTTTTGTACAGTTAATAATGACAACGCCAGAGCTG  
GATACGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCGTCTTA

GGAATCGCGGGTGATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATA  
GGTCAGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGC  
GCTGTAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTAC  
CGATGAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAA  
AACACGGAGAGGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAA  
TCAGGTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAG  
GGGTCCGTAGGTGCGTGACCTACAGCGAGAAGNTCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTT  
CCTCCGGACACGAAACCGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACT  
GACAGCGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGT  
GTGTTACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAA  
GAAGGCGACGCAAAAGAAACCAGACCCCCAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGA  
CGAATCCGATGCCGTTGTTACAGCAGGGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATG  
GCGTCCAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAG  
TGAATNCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAACGGTAGGC  
GAGGAACAAAGTTAGCTATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGT  
AGGCAAACATCGGATGGGAGGATACGAGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGA  
AACCTATGTCATGGACGGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGG  
CCAAGCTGCCGATTGCCGCTGTAGGCGGAAGTGGCGGGAAGGTGTCTTAACGTTGCAAGGGACCTGAG  
CGAGGGCCAATACCCAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAATCAATACCCCTAAGACCAATT  
TTAAAAGCCATTATTTGGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAG  
GAAAAGCTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAG  
CAGGCAAGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGC  
CCAGAACATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGGCGA  
GACGGCCTTCTCGGCATCAGAATATTTGTTGTGCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAG  
GGGCTGGTAAGAACTTTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGG  
ACAATTCATGCGCGCTCGTGTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGGTACAACGCC  
GCCGTATGAGAGCCCACGGGGGAATCCTCGCCTGCGTGTTGTGGGCGGGTGGTTCCATCCCGAACCGCCACG  
TAGCAGAGCAAGAAGTTGCTTGTAACGACTTGCACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACA  
GCGTACAGCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAG  
TAGTTAGCTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATT  
TGCTGCCAAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTTC AACGCCGAACCTGACGA  
ATAAAACGGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATTAC  
CCGGTGAGGACTTTAATAGGCGGAGGTCCTGCCACTCACTAACGCAGGATACGATTGGAGGGCGGAAATCT  
CCCGTTATAAAATCCAGGCTGAAAGAGTGATCAGAGCGGAACAAACGACTCAGGATTCCGGCAACCGTAAT  
CCCGACAGCGGCGTCAGTTGGGGAACAGCGTGCCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCC  
GAACTGACTATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGG  
GCTTGCGCCTAGCATTTGATTTTCTTTGCTTAGGCACTTCGTAGTGGGTA CTGATCGAAACGAACGAAACTGAA  
CGTGACAAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATG  
ATAGTATATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGT  
GATGAAATTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACC  
ATAGACACGCAGACAAAGACACCCCATTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTACT  
CTTCAGGTTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCAGGGAAACCGCAAGAAAACAGCT  
ACCCCGCTCCAAGTGCACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGA  
GGAGCTCTTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGC  
AATGTCCTAAGGCCAGTGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATA

CATTCCGCGGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATG  
GAAGATTGTCACCATAAGCAGGGAACCTTGTTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTA  
TCATCTACCCCGCAGGGGGGAAAGTTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAG  
ACGGTGGAGACTGCTTAACTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACT  
GGGAGAAGTCACGCTATCAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAANNNNNNNNNNNNNN  
NN  
NNNNNNNNNNNNNNNNNNNNNNNNNNCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGT  
ATGGGACCTAAACTCAGTTAGCAGGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGG  
GTAGCCCCTGCGCGTGAAAAGGTGTCATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTG  
GCACCTCTAGCCCCAATGGCGGTGTGGCGAGTCCAGTAGTCTCACCAGTCTAAAGGAGGAATGGGCAATGG  
CCGAGGCACGTTGGGAGTAAGAATGTACACGGAGCCGCGGAGTGCTTTTGAAGGTGAGAACAAAAGGATA  
TGTATAACCACTCCCCGGATGAGAGCCTCTGGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAA  
CGCCTGATTGGTAACGGAGCCTGTATTCTAGATGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGT  
AGATGTAGGTACCACCCGCTGGTCCACAGGAGACGTTGACGCCCGAGCGGTGCTAGTTGTGACGGGGAGG  
CGACGCTTAGATGTAGTAGGCAGCCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACA  
AGTTCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCCAAGTTAAGGTCTCTGCCGACATAAGACCGGGGA  
ACTGAGATACAAGGATCGTATGGACCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGC  
GTGCTTAACCGGTGACGGAAGTTAAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGT  
ACACTGTACGGGGAGATAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCCTCCCGTACGAGGCT  
AATCGCACCCCTGCGCACCAAGGAAATTTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATA  
TTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTGC CGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAG  
AGGCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGG  
TGATGGTACCTGGTTAAACTACAGGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTAAAA  
ACCCAGGCAAAGAGAAACAACGTAACGATCTGGTTGGAGCTTTGCTATACTGACAAATGACTCACCTTTGAA  
AGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATT  
CTAAGTGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCAATGA  
CCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGA  
TGGCTTGCAGGGGAAAGGTCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTACCCAGGATCCTTCT  
CCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGA  
GTACTATAGACTAGGGCCCAATTTTTGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGATTGCG  
CCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAG  
AACTGATTACAGCTATTTTTCATGGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCT  
ACACCGGAGACTCCAGGCCGATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGA  
CTACATCATAAATCCAAGGCAATCTACTTCTATTGAGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAG  
GGAAGGGACGGTTATGATACCTTACCCGGTCAAAGCGACAGACCCCTCAGACAACGTCTAACCACGACCCCA  
GTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAGGAG  
CTGAACGCGAACAGGGACGACTCGGACCCGAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGT  
CTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAG  
AGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTC  
ACTCTAGCTGAAGATAACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCCAAGCGGGACTACT  
GTTGATGCTCCAAACTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGA  
CGGAAACGAAAATCTACTCCGACGGGGGGATCCCTCAAATCCGTACGCAGGTTACCCCCGCGCGCCACA  
CTCTTGTTATTACGATCTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTC  
ATCTCTCCCGCTTGTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAA  
AAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGACGGGCCGTTACGGGAAAGAGGGGGACCA



GCAGACGTTTGCCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGA  
GCCCTAATGAGGCGGTGTGCGAAAATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATT  
GGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGTCTTGTAGGG  
TACAGAGTCACCAAGGTTCCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGGCGCCATGGGTAAGCGGTA  
ATCCGTCAGCATCAAAGCCTTACGTGGGTGCCCGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGT  
GCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGT  
GGTTTGATAGGGTAGCGTCAAAGGCCGCCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACT  
AGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAA  
CAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTT  
GTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTGATGGGTGCCGGGGGGCGCGCTCACAACGGCGT  
GGCCTTTGGGCTGCTCTGGACTAAGGGCAAAGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTCTAAG  
CAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTAT  
AAGTGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAA  
GTCGCCGTAAAGTTTCTGTCGGACAAAGAGCGGGCAGTGCATACCCGTCCCCTAACAAAGGCGAGGAAACAAA  
GTGAGTGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCAC  
TGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTACGCCGTTAAAATTAAGTGGCGGCT  
CGGGGTCCCGACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTG  
GGCAGTTCATCGGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGC  
GAAGCATCGTGCTACCAGCCCGCGATAAGATACCCGCAAAGAGTGCATAAAG

>S2, London\_17, VIM, 02.09

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATNGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACNCATTGTCGNGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGG  
AACGGCATAGTAGACGTTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTIONACTA  
AGACATTTAACAAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCT  
CTCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTA  
GACTGTAGCTGGCTCTACCCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCT  
TATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACA  
GAGTGAATTTCTTGGGGGATTGTTTGTGTGCCTTTGCGGAGGGTCTTTCTCGTCTATTCGGCGCTTGTCCAC  
CGCCCCACTCGGTCGCCGCTGGAAGCTATATAGGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATGAT  
CAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTGATTGGTATGTTGGCACGCATGGTCTT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCACTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCCATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGANGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATCTTTCCGCTTGTCT

ACACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTG  
TTTTACCACTTACTCANCTTTTAGTTTCAGTAAGGCACCGACNGCTTTATAGCCCCGCGCTGCTGTCCTGGATCT  
TTAGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCC  
CACGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTNGATAACCCAG  
CCGATNTGGATCTCCATTACATTAACGGCCTATGCNTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAA  
CCTAACTTTGGACCCGCCGGCTAACATGAACGCGTTTTCCCTAGACGTTTAGTTTAAACTCCCCTGCTGCGAGC  
TAGGATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGA  
CTATTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCCATNTTCTCCATGCCCTGCGGTTG  
CTCGTCACCACATTCATCCTCCTTTCTTTAAGGAGGGGTTGGGCCGCTATAGGCGCGCCTAAGGCTCGACC  
AGCCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATC  
CTCGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCAC  
GAGAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGCAGGTTGCTTTG  
CGGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTGGTGCAGTTCGGTCCGTGACTCA  
CGAACATTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGT  
GTTATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCAT  
ATGATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGA  
CGATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTGCGAGGA  
GTGGCCTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTNATCAATGCGGACTGACTCCACGCTCCT  
CCTCGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCAGTATTAGCACGCTTACTTACGGAGGTA  
CCCGTGCTGAGCGCTAGGCACGGTCTGGCCATCGCNACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCC  
CTGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTACACCAGGCCGAGCGCTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCCGTACGATTGCTAAGATATCCATTAC  
GCGCTGCTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTTCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCACCCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTCGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTCCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCCTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCATTGTTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTTCCGGGGCT  
GTCCCTAATAGATGTAATGCTATCAGAGTGTCTCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTG  
GGGCGCTGCGTTAGANCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGCG  
ATTTACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGNATACATTTCTCCGCCTTGGCGT  
GCCCCCTCTCGTTGCGTTTTATTCTGGGTTCTGCGTCTCTGTCCTTCTCGCGACAACACACTCCGGCG  
CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCGGCTACTTAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTAATCGTCACGCCGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA

TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCGTCCCGTTTTTCTGTTTCACTNTGCCACTGACGTTTTNCGACGGTT  
GTGTACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGGCTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGA  
CCCTTGATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTCTTGCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTNACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTT  
TCCACATCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTCCGTAACCTGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTTCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATAC  
GCGCCCCGCTGGGCCGTCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTAC  
GCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTACC  
CACCTTAAGGCCATAGCTGTGCGCTTAAATCCGGGTATTTGTCCCCCCCCGANGTCTCGCTTCGGGGATTCC  
CCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTNTCTGCGCGCCTTGCCCCACTGGACTTGAGTC  
ACGNCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCNCCTCC  
GTACGGGAGAAGAATAATTTTTCATGTTTCGCGTACCTACGTGATCAGGCTCGCCGGCTCTGCCAGCACA  
CGTTGGCTAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTCATCATGTCC  
TCTCGACCCCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGA  
GTGTCAGCCGGAGCGTGTTCCTGTATCATGCATGCTCNCCTCTCGCGGTGGCACGCGGAACCAATTTTGT  
CCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTA  
ACAATTTNACCCATCGCTGGGACCACTTACTACTACAGTATCCAAAACCGGTTTTCTGATGACTCGTTTGAC  
TGTAGGCCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCNTTGGTAGATAAACGAGT  
CAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATT  
AGTCGTGCCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATT  
AGCCGATACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGAGTCTA  
CTCCAGGGTATTTGGACCATCAAGTCGCCGTCAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTA  
GTGGGCGCTCTGTTTTAGTAGCTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAG  
CTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATT  
CTTTTTCGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGTAC  
TCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTA  
CTATTGCCGTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATC  
CGCGTGCTCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTT  
CGCTCTGCTCCTCCTAGTCTGCGTNTGTGNATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCG  
AATATCCCTGCCTTAGACAATTCGTAGCATCATNACTTCTACCCTCATTAAGTGTCCGAACATCCAATGATGC  
TTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGT  
GGACGTGCCCTTGCNACGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTACAACATCACC  
ATGAGGATCTGTTATTCGGGCCGTCTGTTAGGCTGTTGGGAGTGCGTGATATCTGTTAGCAATACATGGGG  
AGAATCTTTGGTACNTTACGTATTCTGCTGTTAGAAATTTTACAGCGGTTTATAGGATTGACCGCTATTAAGC  
TTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGG

TCAAGCTGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCGGCCTGGTGCTCTTCGCCGAGCTAAAGAAAC  
CGGGAGCGGCCAAAATATTGCTTTGTATGTGACTGCGGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTA  
GAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGNNGTCTGTGGAGGAAGACCTCCCATTACAACAAC  
GGTCCCGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCCTACCAAGCGTTGGCACGTAC  
CTCACCCCGTTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGT  
TGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTCTGNGTACCAGGGGGTTATTTACCATTTGTCCA  
ATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCC  
CTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAA  
AGAAGGAACCACCGCAAGTTGCGTGACGGTCGGTGTNCCTCAGTCACCCTTCTAGTCANTGAGTACGATATT  
TGGATAGTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAAACCTCTCAACCTTCTCCCCGCTNTTTGGGC  
TCTAGATTTGGGGGCTCCCCGTTCTGCGCGCATATAGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAG  
GCTTTTTACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTATGGCTCCGGTCTGAGCGCGTGTCTACAT  
CCATGGCGGTCCCTATACCTTAGTCGGATCCTGTTCTGTGGCCTATACAGAAAGCTGGGGGNACCAGGGATTG  
CACGGCAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCG  
ATAGAACTGAGCGCAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTGAAC  
GCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGT  
TTTTGCGCAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCC  
TGACGGATCCAGTCGTCTAACCAGATTTTTAGTTGCGAAGTGAAAGTGCCCCGTGAGCACTTCTCTCCTGAG  
TAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGAGC  
GCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATNCAGGGTTCTGCGCTGCG  
AAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTTAGCGTGCTGGCTAGTAAAGTGGCCT  
GCGAACGTGAGATGGGCCGGCCACTGCAACTAATGTCTAATCCTGACGTTGGCTTCTCAGAGCCCAATGC  
ACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTNCACGTGCTCCATTTGGCATTGGGTG  
GTACGAAACCGCACTCGGCAAGCGCAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCAC  
ATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGA  
GTAGGTCCCGGTTGCAATATGTTAACTTTGGAGCATGCTTTATTGCACTCGGGTTGGGGATCTTTCCTATACT  
CAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTACT  
CGTAATATGAACAGCCGGCGTGCGCCGTAAGCTACACAAANATCTATAGGGTATTCGCCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACA  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAA  
CGCCGATAGTGGCGCCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGGACGCNNGTATCAACAGCCGACG  
GGTCTTTTGTAGTCCGCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTGTTCTAAAAGGGTTCGGCAA  
CCGACGGACTGACGCCGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCG  
NCGACGGATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGA  
CAACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGG  
CGCAGTGCTACATGTACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGC  
AGATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATG  
AGGTTGCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCCTCTTGAATCTGTACCGCTATTCTG  
GATAGGAAGGAAGTACGAACTAGACNGCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGT  
AGCTACCGGGTACGCCTCTNAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAG  
TCTACGCCGACTGAAAGCGGGTGTGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACTACC  
CAACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGT  
ACGGTGTATGTGTACTGGGCCGCTTATCTGNGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGC  
CTCCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCA

AAAGAGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCNC  
AAAGAGTTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAG  
CCCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAAGCACGCGTGC GTTCGCC  
CTGACTATCGACCCGCGTGCTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCTCCTTTGTTCTCTC  
TGGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCACC GGCC  
AATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCA  
TATAATAAAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGANTTATACTCGACCACGCTGCGAGTACTACC  
GCTACGTGGCCATTTCCACTGGCANAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTC  
CCCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATC  
GGAGTCCCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCG  
ATTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATNCA  
GTGCAGAAAAAAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAAT  
AATCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAG  
GTATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCCAAAGGAGGATGTCAGACCCCGAGGTGTAGC  
GAGCGNGCGGAATCGGATCGAATGAAAAAGCTGTGCATCCGNAAACACCGTCTTAAGAATCGCAAATTGA  
GGCGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACG  
GCGGGGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCNGTTACAGCCTGG  
CCGTATACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAA  
ATATTTAACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAG  
GAGCCGTAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAA  
GCGAGCGTCTCCGCCACCAATTGCCTTCGCGAGTGGCGACCCCGGTCCTGCGCATTAGAGCATGTGGACCCG  
AATGAACGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGA  
AGGCGCTTCGATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTT  
AAGTCAGCGGACCAAAAGATAGGGACCAAAGTAGTTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATA  
CGAAGTAACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAA  
TCGCGGGTGTATGCCCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTC  
AGGCTCGGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTG  
TAGAGGAAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTNCCGAT  
GAGGAGTGCACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACA  
CGGAGAGGGTGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAG  
GTTGATGTCAAAGTACCCGTAGACCAACCGAGGTCCGGTGTGACATAGATTAACACAGTGCCGCCAGGGGT  
CCGTAGGTGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCC  
GGACACGAAACCGGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAG  
CGCACTAGCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTT  
ACGGTGGTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGG  
CGACGAAAAGAAACCAGACCCCAAGTACTGGTGGCGTGTGTTGGGGTCCATTAATGAAATACGGACGAAT  
CCGATGCCGTTTCGTTACAGCAGGGGGGCACCATCTCCCTAGCTTGCCCTAGGAGAGGCTATGGCGTC  
CAATTAGGTCTTACACCCTGCCGAACCGCATCCGGGGAGGCGCTGCAAGCGCGTTCGTTACGCCAGTGAAT  
NCCTGCAGACGGATTGCGCACGCTTTGTATCATGCCGTCCGGCCAACAAGTGGAGCAAACCGGTAGGGCAGGA  
ACAAAGTTAGCTATCCATGATATTGGTGNNTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAA  
ACATCGGATGGGAGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTAT  
GTCATGGACGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGC  
TGCCGATTGCCGCTGTAGGCGGAAGTGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGG  
CCAATACCCNAGCTAGAGGTGCAAAGCGGTACGGTTCAGTGAAATCAATACCCCTAAGACCAATTTTAAAG  
CCATTATTTGGTAGTCGCGACAGAGGAAGTGTCTGGACCGANAGTGTGGCGAAAGGCAACAACAGGAAAAG

CTGGCGAAAAGGCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCA  
AGAAATGAAGGCGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCCAGAAC  
ATGGCTATTATGAGGGATCCGCTCTCATTTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCC  
TTCTTCGGCATCAGAATTATTTGTTGTGCGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGG  
TAAGAACTTTAGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTC  
ATGCGCGCTCGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGTAT  
GAGAGCCCACGGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACGCCACGTAGCAGA  
GCAAGAAGTTGCTTGTAAACGACTTGACCCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACA  
GCGAGAGCAGCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAG  
CTAAGCTGTGGTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGGACGCATTTAGATTTGCTGCC  
AAGAGTATGAGGGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAAC  
GGCAGCCTGCAAGCATTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGCATNACCCGGTGA  
GGACTTTAATAGGCGGAGGTCCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTAT  
AAAATCCAGGCTGAAAGAGTGATCAGAGCGCGAACAAACGACTCAGGATTCCGGCAACCGTAATCCCGACAG  
CGGCGTCAGTTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGAC  
TATCATGCGAGGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGC  
CTAGCATTTGATTTCTTTGCTTAGGCACCTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGAC  
AAGAGAGATATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTGATGATAGTAT  
ATGGGGCGGGGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAA  
TTGACGAAGCTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTCTGTTAACGTGGTACCATAGACA  
CGCAGACAAAGACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGAAGTCTTCAGG  
TTCCAATGGCTGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGC  
TCCAAGTGCACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGACGATTGAGAAGTTTGGGAGGAGCTC  
TTGGCATTTCAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCT  
AAGGCCAGTGGCATTAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGC  
GGGGGGTAGAGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATT  
GTCACCATAAGCAGGNNACTTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTA  
CCCCGCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTG  
GAGACTGCTTAATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGA  
AGTCACGCTATCAGGAACTATGTCAGTATACAGGGCGTNGGCCTAAGAACGAGCCCAGGATGGGACTCAAC  
GCAAGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAAC  
CCTTCGCAAAGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCA  
GGAGGGGCGGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCTGCGCGTGAAAAGGT  
CATAGCTATTTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGT  
GTGGCGAGTCCAGTAGTCTCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGA  
ATGTCACACGGAGCCGCGGAGTGCTTTGAAGGTGAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGA  
GCCTCTGGCGACGCCCGGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTG  
TANTCTAGATGTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGT  
CCACAGGAGACGTTGACGCCCCGAGCGGTCTGATGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAG  
CCCTCCATTTGTGAGAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGC  
ATAGGAGCATATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATAACAAGGATCGTATGG  
ACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCNLTGACGGAAGTT  
AAAGTCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTA  
GGGCCATCTAGCCCTTACTCATGGCCCAACAGTTCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAG  
GAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGT

AGGGAATAAGTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCTTTGTGTTAA  
TGTGACGAGGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAAGGTGATGGTACCTGGTTAAACTACA  
GGTCCCTAATGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTATGGTANAAACCCAGGCAAAGAGAAACAACGT  
AACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCC  
GCCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGG  
TCCGAAGGACGAACAGCTGACAGTGCAAGCANTATTGCCCCCAATGACCAATCTAGCTGGACTATAACCATT  
GATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCG  
AGGCGGTCCAAACNTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTG  
GGTGGAGACAGTAGGNAATCAACGCGCTTCAAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAAT  
TTTTCGCAAGAAAGACTAAAGTTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGA  
CACTGGGTCTAGCGGGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTATTACAGCTATTTTTTCAT  
GGAGCCGCTCAATAGCGGGCTTTCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCA  
TATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAAT  
CTACTTCTATTAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCT  
TACCCGGTCAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTG  
AATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGAC  
TCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGT  
CTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTANNGTGCCAGCAGAGTAGCTGCACATCTCCCTCCG  
GCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCAGC  
AAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAAACTGATGGA  
GCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAACGAAAAATCTACTCCG  
ACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCCGCACTCTTGTATTACGATCTTTCTGC  
CTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAA  
GAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACA  
GCAGACATTGTCGGCTCCGAGGGCCGGTACGGGAAAGAGGGGGANAGCAGACGTTTTGCCCGAGAGACCA  
GCAGGTCGTGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAA  
ATACTCTCATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTT  
ATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTCACCAAGGTTCCGGAT  
CAGGCAACCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCNTCAGCATCAAAGCCTTAC  
GTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGACTCCTTGTGCACGANNTCCCTAGCTATCCG  
GCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGATTTGATAGGGTAGCGTCAA  
GGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTT  
GGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTAT  
CCGAATACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGT  
AGACGGTCACTATTGATGGGTGCCGGGGGGCGGCTCAACGGCGTGGCCTTTGGGCTGCTCTGGACTA  
AGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGC  
ACTTACTGGCCGTAATAACGACGAGACACAATTCTCCCTCCACCGTATAAGTGAGACCGTAGGGAAATCG  
CGAGGTGATAGTCACTGAGGAGGTGTAGTACTAGGTCAGGTGCCGGCAAGTCGCCGTAAGTTTCTGTCCGA  
CAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAAGTGCACCAACCATGCGATC  
CTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCT  
GCAGGTGGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGT  
ATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGNGGGCAGTTCATCGGCTACCTAGCTC  
GTANCGTCGGATGTACACAATAGCGAATGGTGGGTGCGTCTCAGGCGAAGCATCGTGTACCAGCCGCCG  
ATAAGATACCCGCAAAGAGTGCATAAAG

>P55, London\_26, VIM-2, 05.13

TCCCTCGTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCGGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGATGGGCGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTTCGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGCATGATC  
AGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCTAAACATCTCAGCGTCGTGCACGCGCCGGAGCCCC  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGTTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTAATTGTACAATAACGTCTGCGGTAACAAGGGGAATCCGCTTTCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATTAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTGTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAANATGAACGCGTTTCCCTAGACGTTTGTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCTTGTGCTATGCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGATTTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGACTGGTGCAGGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCACATTATTAGCACGCTTACTTACGGAGGTACCC



GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTTCGCCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGCCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGTTTGGTTTG  
GGTCTCCTTCATATCATTTATCTGGCGTCTCACGGTCTCGATGCAAGGCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC  
CCTAATAGATGTACTGCATCAGAGTGCTTCCCTGCTGGTGTCCAATCTCATGCACTATGTCGTACAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCATTCTAGGCGCGGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGGTGCACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGACGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGGCTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCCC  
TAGCCTGCCCTTTGTAGCCGTCACTTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCCGATGGTCTGTAAAATATCGGGACCCCGCCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCCGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCCTCGTCCCGTTTTTCTGTTTACACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTCATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAAACCTCAGTGGTAGTGGTCCGCATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGGCGGTGGCCACGCGATCTACCCAAGTTTTATACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTGAAGGTGGCGCATCCTCTACAGAGGCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTTACGCCGCTTTCTGTTCTGCCAGACTAGGTTNGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAAGCGCAACTTGCGGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGGACTTTATACGCGCC  
CCGCTGGGCCCGTCCCCGGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCNCCCCGAAGTCTCGCTTCGGGGATTCCCCGCA

CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCCTCCTCCGTACGG  
GAGAAGAACTATTTTCATGTTTTGCGCGTACCCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCTCCCTCCTTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGAC  
AACACTCAAAAGTCGTGTGCGGGGTCACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCCAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGNTGGCCAGGGTGTTTTGTCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTGTTCAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTACTCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTT  
GCTGGAAGACCATAACGACTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTTATTTGACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCNGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCCTATTAAGTTCGGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCACGACCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCCTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCGGGAACAGGTCAAGC  
TGTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGCCTGGTGCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTNGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAA  
CACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACAACGGTCCC  
GGAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTACCTCACC  
CCGGTCCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGTACCGGCGGGGACACTCTGCCGAGTTGCTAA  
ACTGCCCTCCGGTGCAAGGGTTTTGGTGTACTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCCAATCACA  
TTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCTCCCATGATTACGTGTACGTGCCCCCTCGCC  
CATGTGCGATTTGGCTCCACCCGCTGTGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAG  
GAACCACCGCAAGTTGCGTGACGGTCCGGTGTCCCTCAGTCACCTTCTAGTCACTGAGTACGATANTTGGAT  
AGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCCGCTTTTTGGGCTCTAG  
ATTTGGGGGCTCCCCGTTCTGCGCGCTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTT  
TACTTGGACTCCCTATTGTGTACTGCGGGCCCTTCTATGGCTCCGGTCCCTGAGCGCGCTGTCTACATCCATG  
GCGTCCCTATACCTTAGTCGATCCTGTTCTGTTGGCCTATACAGAAAGCTGGGGGACCCAGGGATTGCACGG  
CAGCGCGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAGCGATAGA  
ACTGAGCGCAATTACAATACGTCTCTCACGTGTAACCTATAAGTCAGGCTTTGTCCTGGTGAACGCTTC  
GGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGGTTTTG  
CGCAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGAC  
GGATCCAGTCGTCTAACCGGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCCTGAGTAGA  
GCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATANGTTCCTCGATATTGAGCGCTTT

AATCTATTCCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAG  
TTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAAC  
GTCAGATGGGCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAATGCACAGTG  
AGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGANGCGTGTCCACGTGCTCCATTTGGCATTGGGTGGTACGA  
AACCGCACTCGGCAAGCGCAGCTCTCTTGTTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGCACATGACA  
TTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGT  
CCCGGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTTCTATACTCAATCT  
GAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCAGTTCTGCCTCGCTCCGTAICTGTAA  
TATGAACAGCCGGCGTGCGCGTAAAGCTACACAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGA  
ACGAATACCGGCGAGGCTAGTCGTCTGTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCC  
CGGGCGGGAGATGGCGTGAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGA  
TAGTGGCGCCCACTGAAGCCCAAGGTGCTTTGATAATTCCCGGACGCGGGTATCAACAGCCGACGGGTCTT  
TTGAGTCCGCCC GCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAACCGACG  
GACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTC  
CGTACAGTTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACG  
GATCGGTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGA  
GGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGT  
GCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCG  
AACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTG  
CCCGAGACCAACGCCCGACANTAATTTCCATAGGCAAACCCTCCTCTTGAATCTGTACCGCTATTCTGGATAGG  
AAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTAC  
CGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACG  
CCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTGTATACTACCCCAACAT  
AGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTG  
TATGTGTAAGTGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGC  
GTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCACTCGGGCCCGTATTACCAACGACGCAGACCAAAAGAG  
GGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAG  
TTCAATGACCCATGTAGACAAGTGGCGAAGACTCTGAAAACGGCGTCTGTACGATTACAAAAGAGCCCTACC  
CACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCTGACTA  
TCGACCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTT  
GTGCGCTTGGTCGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACA  
GGGGACAAACACACGGACTCCACGCCGCTTTTGGACTGAATCGCGACCTACTTGGCCGATGTCATATAAT  
AAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCAGCTGCGAGTACTACCGCTACG  
TGCCCCATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTC  
TAAGGCCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTC  
CCCTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAAGTGTCCCGATTCAA  
AAGAACCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAG  
AAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCA  
CCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGT  
TCCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGA  
GCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCT  
GACAGCCATCCACTGCCGTGGCAAGTGACGTACATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGA  
TAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATAC  
ACTTAAGTTTACAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAAC  
GCCACGAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAA

ATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTC  
TCCGCCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGA  
CGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCG  
ATGTGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGG  
ACCAAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACG  
CCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGGGTGA  
TGCCCTGTGAAGAGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGC  
CGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGTAATACCGGTGAGGAGCGCTGTAGAGGAAGA  
CTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCG  
ACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACCGGAGAGGGT  
GGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAA  
AGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCG  
TGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAAC  
CGCGAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAA  
GTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGC  
CAGCTGAGGTTCCGATGTAACCCGACTATACTAAGAACCCTCTGGACTGACCAAGAAGGCGACGCAAAAG  
AAACCAGACCCCAAGTACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTT  
GTTACAGCAGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTT  
ACACCCTGCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGGTTTCGTTACGCCAGTGAATACCTGCAGACG  
GATTGCGCACGCTTTGTATCATGCCGTCGGCCAACAAGTGGAGCAAAACGGTAGGCGAGGAACAAAGTTAGC  
TATCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATG  
GGAGGATACGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGAC  
GGGGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGATT  
GCCGCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCC  
CAGCTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTT  
GGTAGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAA  
AGGCGGTGACAAATTTGCGGCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAA  
GGCGCAGAATAGTGTTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAAATGGAGCCAGAACATGGCTATT  
ATGAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGC  
ACCAGAATTTTGTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACT  
TTAGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCT  
CGTGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCGCCGATGAGAGCCCA  
CGGGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCCATCCCGAACGCCACGTAGCAGAGCAAGAAGT  
TGCTTGTAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCA  
GCGTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTG  
GTGCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATG  
AGGGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTG  
CAAGCATTATGAGATGGACAGCTCCCGGCGTGCACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAAT  
AGGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAG  
GCTGAAAGAGTGATCAGAGCGCAACAAATGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCAG  
TTGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCG  
AGGGGGAGGCAATCGTCTCCTCCATGCCCTTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATT  
GATTTTCTTTGCTTAGGCACTTCGTAGTGGTACTGATCGAAACGAACGAAACTGAACGTGGACAAGAGAGAT  
ATGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGG  
GGTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAG

CTCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACAA  
AGACACCCCATTGTGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTTCAGGTTCCAATGGC  
TGCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCAGCTACCCCGCTCCAAGTGC  
GACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTTCAGAAGTTTGGGAGGAGCTCTTGGCATT  
CAAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAG  
TGGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTA  
GAGCAGCGAGTAAAGGTGTCNTAGTTTAGGCAGACACAAGGACCACGGGGGCATGGAAGATTGTCACCATA  
AGCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTT  
AATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTCACGCTA  
TCAGGAACTATGTCAGTATACAGGGCGTGGGCCTAAGAACGAGCCCAGGATGGGACTCAACGCAAGCATC  
AAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCTTCGCAA  
AGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGC  
GGAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCCTGCGCGTGAAAAGGTCATAGCTAT  
TTAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACCGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACACG  
GAGCCGCGGAGTGCTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGCG  
ACGCCCCGGAGGAAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGAT  
GTAAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGAG  
ACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCATT  
TGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCA  
TATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAAG  
CCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCTC  
TGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGTC  
TAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCCGAAGGAAATTTTC  
CTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAATA  
AGTTTGCCGATTCTGGCGAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCTCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTTGAAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC

CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGCACTCTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGGCCGTGAGACGTGTGATCTACCTAGTGCCTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGAAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGCGCGCTCACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTGAGTACTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGGACGAGCGGATTCAGCCGTTAAATTAAGTGCGGGCTCGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGCGTCTTCAGGCGAAGCATCGTGCTACCAGCCCGCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P46, South East\_6, 12.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTTACTGCTGTCCCAAATGGCCACACCCGGCGGTCAAATTCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACCTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAAACCGGTCTC  
TCTTCGGGACTGACTCTGCCCTCATTACCTATTTTCTTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGNTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACNGGCCTTGAGTGAACAG  
AGTGAATCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCCACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCAACCTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTTCGCGGGAGTCCCTAACATCTCAGCGTCGTGCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCCTTACATTGGTATGTTGGCACGCATGGTCTC  
GTAGCCCAATCCTCTAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCTGCGGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA

CATGCATTATTTGTCACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTACCTATTGCCGCATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGTCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTGAGTCCGACCCCATCATCTCAACTTGTT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTGTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTAAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCANTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTGGC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGATTCCCGTCCGTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAANCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAGCACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGAC  
GATCCATATAATAGCGCTTCTCTGTCGATGTTGCTCCACCTGGTGGGCGGGCGCATCACGGGTGCGGAGGA  
GTGGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTTTCATCAATGCGGACTGACTCCACGCTCCTC  
CTCGCAGGTAATCTTTTCCGGTAGTAATGGAGTGTCCGGTGCGCATTATTAGCACGTTACTTACGGAGGTAC  
CCGTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCC  
TGAGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGGTCCAAAGAGTTA  
GCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTACGATTGTTAAGATATCCATTAC  
GCGTGTGCTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACC  
GACCCTACCGCACAGGGGACTATTAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTTGTC  
TACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTTCATACCGCAAATCGTCATTTAGCTTTGCTAACTT  
ATAAAGGTGCGTGTTCGGGAGGATTAGATACACGTCCCTCTTGGGCCCTATCCTTTCCGCATACCAAACAGAT  
TAGTCAACCTTCGTATCGACAGAGACCGACGCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTG  
TTTTGGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATG  
GGTCTTGCCTTCGTCCCAGATAGCGTAAATTTCTTGGGCCCCAGGCACTGCCTACAGATTACTAATGATGGAG  
CTTACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTTCAGGTTCTTCGTGCCCGGTTTGGT  
TTGGGTCTCCTTCCATATCATTATCTGGCGTCTCACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTT  
TACGAGAGTAATCNTTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCT  
ATCCCTAATAGATGTAATGTCATCAGAGTGTCTCCTGCTGGTGTCCAATCTCATGCACTATGTGCTCAGATGTTA  
GGTTCGGCGTTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGT  
GGGCGTGCCTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCG  
ATTTACCCTTGGACTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTGTTTTAGATGCGGGGTGCG  
ACAATACCGAAGCCTTGGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTT  
CGGTCTAAACACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCTTGGCGT  
GCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTTCTCGTCCCTTCTCGCGACAACACACTCCGGCG

CTCATTGCGGCGTGGCCCTATGGGTTCCGACGCCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAAC  
GCCCTAGCCTGCCCTTTGTAGCCGTCACITTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGG  
TGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATC  
CTTAATCGTCACGCCGATGGTCTGTAAAACCTATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACA  
TCAGTGCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTGCTCCCTACGGTAACG  
CGGCAATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTTCCGTAGTCTCACGACGATACCATATTA  
TTATGCCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAGCTCAATGAAAGGCATT  
TGTGATTCTAACCCAGGTGACGGGACGACTGTCACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAG  
TATCTGGGGTGAGCAGCGGCCCTCNTCCCGGTTTTTCTGTTTCACACTGTGCNCACTGACGTTTTACGACGGT  
GTGACTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTNGAGCG  
CTCGGCCGACCAGGGCCACCCTCGCGGACCGCTTTGTGCTGCGGCCCTTCCCCCAATATCTTCTCCATTGA  
CCCTTGATTAACCAACCTCAGTGGTAGTGATCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAG  
CGATGCTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTAGCCAAGTTTTGTACAGATCCGTTAT  
GTCGAAATCCCCATTAATACACGTAACACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTTACCCCC  
CGCCGTCGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGT  
AAATGTACCATTAATCAGTGACGCCATTGGAGGTACGGATTGCGGGCACGGATCTTAGCTGTGCCCTTCTCT  
TCCACATCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTANCCGGCGGACAGAGAATGTCGGTTTTCTT  
ACTCCCCTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAAT  
TTAGATTTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTG  
CCCTTATTGTGACGGGGAGATCCAAATATGCGGGTNCCTTTACGCCGCTTCTGTTTCGTCGCCAGACTAGGTTA  
GGAACCTATCCAGTACCTCTTCCGTAACCTCGTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACAT  
TAAACCGCTGGGTAAGGCGCAACTTGCAGGAAGTGTGTTGCGGGCGCTCGACACNGCCGGGGGACTTTATA  
CGCGCCCCGCTGGGCCCCGTCGCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTA  
CGCCTCCCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTAC  
CCACCTTAAGGCCATAGCTGTGCGCCTTAAATCCGGNNATTTGTCCCCCCCCCGANGTCTCGCTTGGGGGATT  
CCCCGCACCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGT  
CACGACCTCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTC  
CGTACGGGAGAAGAAGTATTTTTCATGTTTCGCCGTACCCTACGTGATCAGGCTCGCCGGCTCTGCCAGCAC  
ACGTTGGCTAACCGCTCGAATTAAGCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTC  
CTCTCGACCCCCGNTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATC  
GAGTGTGACCCGGAGCGTGTTCCTGTATCATGCANGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTT  
GTCCGGACAACACTCAAAGTCGTGTGCGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGG  
TAACAATTTGACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTG  
ACTGTAGGCCTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTNGTAGATAAACGA  
GTCAAGTCCGAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGA  
TTAGTCGTGCCCGTGAGGCTTCTTCCCAGTGTGGCCAGGGTGTGTTTGTGTTCTGACCTCCATCCAGATCAT  
TCAGCCGANACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTC  
TACTCCAGGGTATTTGGACCATCAAGTCGCCGTACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTG  
TAGTGGGCGCTCTGTTTTAGTAGTTCATATCGTCTTACGCGGGCACTACTAATGGTACCAGTCCCGCATCT  
AGCTGGGTAGTGTACTCGCCATAACCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAA  
TTCTTTTTGCTGGAAGACCATACGAGCTCCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTTGT  
ACTCCTGAGCAGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGGCGCTAGTGGCT  
TACTATTGCCGTTGGTCACGACGACGGCAGGTCTGGCCCCGCCATCGCTGGAGCCGCCGCTGATGGTCCA  
TCCGCGTGCTCATGCCTTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGT  
TCCGCTCTGCTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATAT



CGAATATCCCTGCCTTAGCACAATTCGTAGCATCATGACTTCTACCCTCATTA ACTGTTCCGAACATCCAATGAT  
GCTTTCAGGTCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCA  
GTGGACGTGCCCTTGCACGCGCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACNACATCA  
CCATGAGGATCTGTTATTCGGGCCGGTCTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGG  
GGAGAATCTTGGTACTTTACGTATTCTGCTGTTAGAAAATTTACAGCGGTTATAGGATTGACCGCTATTAA  
GCTTCCTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTCCCGCTGATTGTGGCTCGGGAACA  
GGTCAAGCTGTAAGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCCTGGTCTTCGCCGAGCTAAAGAA  
ACCGNGNGCGGCAAAATATTGCTTTGTATGTGACTGCGGGTATGTCGNCCATGGGGCGGNTNGTCGACTCC  
TAGAATAACACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCCATTACAACA  
ACGGTCCCGGAAACCTTGTTGGTAGTCGGGAGAAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTC  
ACCTCACCCCGGTCGGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGA  
GTTGCTAAACTGCCCTCCGGTGCAAGGGTTTTGGTGTACACTCTGTGTACCAGGGGGTTATTTACCATTGTGTC  
CAATCACATTCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCCATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTAC  
AAAGAAGGAACCAACCGCAAGTTGCGTGACGGTCCGGTCTCCCTCAGTCACCTTCTAGTACTGAGTACGATA  
NTTGGATAGTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCNCGTTTTTGG  
GCTCTAGATTTGGGGGCTCCCCGTTCTGCGCGCGTATAGGCCAGGAAGTTGCAGCATACGATAATCTTTTCA  
AGGCTTTTTACTTGACTCCCTATTGTGCTACTGCGGGCCCTTCTTATGGCTCCGTCCTGAGCGCGCTGTCTA  
CATCCATGGCGTCCCTATACCTTAGTCGGATCCTGTTCTGTCGCTATACAGAAAGCTGGGGGCACCAAGGAT  
TGCACGGCAGCGCGAGGTGATATCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGATCGAAGAG  
CGATAGA ACTGAGCGGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTACTGGTG  
AACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGC  
GGTTTTTGCGAATTCTACGGGACGCACCCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTA  
GCCTGACGGATCCAGTCTGCTAACCGGATTTTTAGTTGCAAGTGAAAGTGCCTGTGAGCACTTCTCTCCTG  
AGTAGAGCCCATCAGTCCGATCACGTGCCGATCTGAATCTTGGCTAGACGCGCCCATACGTTCCCGATATTGA  
GCGCTTTAATCTATTCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTG  
CGAAGAGTTGATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGC  
CTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAATCCTGACGGTTGGGCTTCTCAGAGCCCAAT  
GCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGG  
TGGTACGAAACCGCACTCGGCAAGCGNAGCTCTTGTACGGCTGGGAAGGTTGCAAGAGACAGTTCCAGC  
ACATGACATTCCGCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCG  
AGTAGTCCCGTTTGAATATGTTAACTTTGGAGCATGCTTTATTCGCACTCGGGTTGGGGATCTTCTCTATAC  
TCAATCTGAATCTTCTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAC  
TCGTAATATGAACAGCCGGCGTGCTCCGTAAAGCTACACAAAAATCTATAGGGTATTGCGCGAGCAAGTAACG  
ACAGAACGAATACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTA CTCAACTCAGCCGAAGACGACGGATAG  
GGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAAC  
GCCGATAGTGGCGCCACTGAAGCCCCAAGGTGCTTTGATAATTCCCGACGCGGGTATCAACAGCCGACGG  
GTCCTTTTGTAGTCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTCGGCAAC  
CGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCA  
GGGCTCCGTACAATTGGCGATCTCATCTGTGCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGA  
CGACGGATCGGTGTCAGATCGACGTTTATCGTGTGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACA  
ACGAGGCGACTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCACCGCCCAAGGCTCTCGGCG  
CAGTGCTACATGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAG  
ATCGAACTCAGACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAG  
GTTGCCCGAGACCAACGCCCGACAGTAATTTCCATAGGCAAACCCTCCTTGAATTTGTACCGCTATTCTGGA

TAGGAAGGAAGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAG  
CTACCGGGTACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCT  
ACGCCGACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCTCTATACTACCCCA  
ACATAGCATGGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTAC  
GGTGTATGTGACTGGGCCGCTTATCTGNCGACTANGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCT  
CCAGCGTTGCTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCCGTATTACCAACGACGCAGACCAA  
AAGAGGGGCTCGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGTGCCATACCCCA  
AAGAGTTC AATGACCCATGTAGACAAGTGCCGAAGACTCTGAAAACGGCGTCGTGTACGATTACAAAGAGC  
CCTACCCACATCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCATTGCCCC  
GACTATCGACCCGCGTGTACCAAGCAAGCATCCCACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCT  
GGGTTGTGCGCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGCGACCGGGCA  
ATACAGGGGACAAACACACGGACTCCACGCCGCTTTTTGACTGAATCGCGACCTACTTGCCCGATGTCAT  
ATAATAAACGAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCG  
CTACGTGGCCATTTCCCACTGGCACAGGCAGCGCCTGGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCC  
CCGTCTAAGGCCCTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCG  
GAGTCCCTTCAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGA  
TTCAAAGAACCCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGT  
GCAGAAAAAAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAA  
TCCCACCAGCTGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGT  
ATCGTTCCTATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGA  
GCGAGCGGGAATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCTTCTTAAGAATCGCAAATTGAGGG  
CGCTGACAGCCATCCACTGCCGTGGCAAGTGTACGTCNTACCTACTAAGCGGTCCCAAGTAGCCTAACGGCGG  
GGATAATAGGTGTAGGAGCGACAAGCCAAGTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTA  
TACACTTAAGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATTT  
AACGCCACGAACCGCTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCG  
TAAATAACCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGC  
GTCTCCGCCGACCAATTGCCTTCGCGAGCGCCGACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAA  
CGACGAGACCCCGTGAACCTTCGGTAGCGCAGTAGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGC  
TTCGATGTGAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCA  
GCGGACCAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGT  
AACGCCTCTCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGCGTCTTAGGAATCGCGG  
GTGATGTCCTGTAAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTC  
GGGCCGTAGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGG  
AAGACTAATTCCTGAGACGCCAAGGCGACGCGCATGTAGGTACCAATCGGCCCTATCCTACTGATGAGGAG  
TGCGACGGAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGA  
GGGTGGGACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATG  
TCAAAGTACCCGTAGACCAACCGAGGTCGGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGG  
TGCGTGACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACG  
AAACCGCAAGAGGGGTAGCGGACCAAAGAGAGTGTGCGATGCTCAAGAGACTCCGACTGACAGCGCACTA  
GCAAGTATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACCGGTG  
GTGGCCAGCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGC  
AAAAGAAACCAGACCCCAAGTGAAGTGGTCCGTTGTTTGGGGTCCATTAATGAAATACGGACGAATCCGATG  
CCGTTGTTACAGCAGGGGGGACCATCTCCCTAGCTTGCTGGCCATAGGAGAGGCTATGGCGTCCAATTA  
GGTCTTACACCTGCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGC  
AGACGGATTGCGCACGCTTTGTATCATGCCGTNGGCCAACAAGCGGAGCAAAACGGTAGGCGAGGAACAAA



AGGCAACGCTTAGATGTAGTAGGCAGCCCTCCCATTTGTGAGAACGCTGGGACCCATGTTTAAGGGAAGTCC  
AACAAAGTTCCGCGCTTTGCAACTGGGCATAGGAGCATATGCCCAAGTCAAGGTCTCTGCCGACATGAGACCG  
GGGAACTGAGATACAAGGATCGTATGGACCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACA  
GTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCCTCTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCG  
ACGTACACTGTACGGGGAGANAAAGTAGGGCCGTCTAGCCCTTACTCATGGCCCAACAGTTCCTCCCCTACGA  
GGCTAATCGCACCCCTGCGCACCGAAGGAAATTTCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAA  
GATATTGCCAGCGGATCGCTGAGGAGTAGGGAATAAGTTTTGCCGCATTCTGGCGCAAAAATCTGGCGCCCGG  
GTAGAGGCCAAAGCACCCCTTTGTGTTAATGTGACGAGGTGAAGCGCCACGTGTTGATTGGGTTGCGATCAAAA  
AAGGTGATGGTACCTGGTTAACTACAGGTCCCTAATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGT  
AAAAACCCAGGCCAAAGAGAAACAACGTAACGATCTGGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTT  
TGAAAGTACGCGCGGAGGGATCCGCCCGCTAAGAAAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCCA  
GATTCTAAGTGTGGAGGATACACAGGTCCGAAGGACGAACAGCTGACAGTGAAGCACTATTGGCCCCCA  
ATGACCAATCTAGCTGGACTATACCATTGATCGCAAATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACG  
ATGATGGCTTGCAGGGGAAAGGTCCGAGGCGTCCAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATC  
CTTCTCCCCTCGTAATGAGGAGTGTGGGTGGAGACAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGT  
TGGAGTACTATAGACTAGGGCCCAATTTTTCGCAAGAAAGACTAAAGGTGAGCAGGCGCTGGGAAGTGGAT  
TGCGCCGTGTGGAGATAAGAGCCGACACTGGGTCTAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATT  
TAAGAACTGATTACGGCTATTTTTCATGAAGCCGCTCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTAT  
GGCTACACCGGAGACTCCAGGCCGCATATTCTGAAGCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGA  
CCGACTACATCATAAATCCAAGGCAATCTACTTCTATTTAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCA  
GAAGGGAAGGGACGGTTATGATACCTTACCCGGTCAAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGCAG  
CCCAGTGGAGTGGTACCCAGATACTGAATTGCCAGGTGCAACATCGAGAGGAGGACGGCATAAGATGGAAA  
GGAGCTGAACGCGAACAGGGACGACTCGGACCGCAGGACATGCTGTGTGAGGAACGCATAGTCGTCGAACC  
CCTGTCTGTTTTGCGGTACTAGTTGGTCTAAGCACACCGTCTGGGGTGCGCCAGAACCCTGAGTAGAGTGCCA  
GCAGAGTAGCTGCACATCTCCCTCCGGCATCGAGAAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGT  
GGTCACTCTAGCTGAAGATACCACGCAAGGAACCCCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGAC  
ACTACGTTGATGCTCCAAACTGATGGAGCCGGGATAGAAAAAAGGCAACCCAGCGATCGGTATGCAGGGG  
TGGGACGGAAACGAAAAATCTACTCCGACGGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCCGCGCG  
CCGACTCTTGTTATTACGATCTTTCTGCCTGGATGCGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTC  
AGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGTGAAGAGCAGGCCGACGTTTATGGTAGGACGAAATGGG  
AGGAAAAGTATGCCTATAACACCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGG  
GACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTCGTCGATTGCGGACTCGTTTAGGAGGATGATGACAGG  
GCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTCATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTT  
ACGATTGGCCTGAGATAGGTACAGCGCTTATAAATGGGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTT  
GTAGGGTACAGAGTACCAAGGTTTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTA  
AGCGGTAATCCGTACGATCAAAGCCTTACGTGGGTGCCCGGTGCCGCAAGGTGGGTTGATGTGTCTGGGA  
CTCCTTGTGCACGACTTCCCTAGCTATCCGGCTGTGGCCATAGCGACCAAGTAGATTGTAGCGAAAAACTCGG  
AAGACGTGGTTTGATAGGGTAGCGTCAAAGGCCGCTAAATGTTATACTAACAAGAGGGTCTGTATGTA  
TTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAA  
CCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATACGACCTTACACNGTCGGTGTGTAGCAGGAGGTTGC  
GAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGCTCACTATTGATGGGTGCCGGGGGGCGCGCTCAC  
AACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCGTACGATTTGTGTGGAGGTGC  
TCTTAAGCAACGACTTAGAGGAGCTCCCGCACTTACTGGCCGTAATAACGGACGAGACACAATTCTCCCTTC  
CACCGTATAAATGAGACCGTAGGGAAATCGCGAGGTGATAGTCAGTGCAGGAGGTGTGAGTAGCTCAGGTG  
CCGGGCAAGTCGCCGTAAGTTTTCTGTCGGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAGGCGAG

GAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGNGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCC  
AGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGGTGGGGGACGAGCGGATTCAGCCCCTAAAATTAAG  
TGGCGGCTCGGGGTCCCAGCATGGTATGTATTTTCATCGAGGTGACAAACGGTAAAATGGGTTACGTTCC  
ACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACGTGGATGTACACAATAGCGAATGGTGGGTCGGTC  
CTTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>E1, London\_17, VIM, 12.12

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTNTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ANACCCCCGCTACCAGACTTCACATGGTTGCCCGTTGCAAGGAGACGGGCTCNTCAGAACTCTAAATGN  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGNGACTAGCTCTCCCTACTTGCTGAANTTGGCGTTGGA  
ACGGCATAAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGAAAACCGGTCTC  
TCTCCNGGACTGACTCNGCCCTCATTACCTATTTCTTTAGTGCATGGGCGTGTGTGGTGTNTAATGTCTTA  
GACTGTAGCTGGCTCTACCNGACTATCTATTCGTCTGCGCNTACCGCCCCCAGTTTTCGCGCCTCTACCGAGC  
TTATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTNTNCCATAAACTCTCCAACGGGCCTTGAGTGAAC  
AGAGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTTCGGCGCTTGCCCA  
CCGCCCTACTCGGTGCGCGGCTGGAAAGCTATATAGGTTGTCCTTCGCACCACTGGCGCCCCGCCGATGA  
TCAGACGCTGCTCCAAAACCTCCAGTTCGCGGGAGTCCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCC  
GGTCAGATGGGTCNAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTC  
CTNAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTNAGCTTTGTGTGAGTGAAGGAA  
TGTGCGCTACTAGAAGTCAGCATCCGAGCTCCACTGNAGTCCGANCTCTCGGTTTCTCTCGAAGGGTCTTC  
TANGTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTGCGTGNAGACTGCCTTTGAGTCGCGCACT  
GCCTCAGTTTTGCCACCTGCGGTCNTTATAGAGAGCACANAAATAGTGCCTTATNAGANACCGACNAGTA  
TGCCCTATNCGTTTACGATCCNNGCGCATCNTGCTCACGGANNACCTCACTAGTTTCTGTTATNTGGTTCG  
GNTTCTGGCTGNTCTGGCGTGGGTCTAGGNCCTCTCGCGTCGANAACGCTTACGTAGAANCAAGAATGGAA  
CGGACACATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGNNTCCACTTTCCCTATTGCCGATTG  
GTGCATTGGAGANTGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTTAGCCAAA  
CAAATGTGNGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACNGCGCATTCTTGACCTCAATATNA  
ACCTGCTCGTATGGACATTTNTAGCAGTTGTTAGCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTC  
CAATCCGCTCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGNGAGATAACCCNTCGGGGGTTGATCATAATT  
GCGTGGGCGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGTACCAACCGCCCCAATTCTTTCCG  
CTTGTCTNCACTATCGCTGTTGCCGACTNNACCGGTGGGTGCGGTGTATGGTTTCGAGTCCGACCCCATCANCT  
CAACTTGTTTTACCANTTACTCANCTTTTAGTNTCNGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTC  
CTGGATCTTTAGATCGCTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACC  
AATAGCCCCACGTTGGTGGCGAGTCGACATNGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGG  
ATACCCAGCCGATCTGGATCTCNATTACATTAACGGCCTATGCTTTTTTCCATTTGCACATGAGCACANCCAT  
CAGGTTAACCTAACTTTNGACCCGCCGGCTAANATGAACGCGTTTCNCTNGACGTTTAGTTTAACTTCCCN  
NCTGCGAGCTAGGATCTCGCTCGACGTATTGAACTCCGATGCCATAATTCGGGCCCTTCCACATATAGGCGT  
GCCACAGGACTATTTGTGGANATTGCGGNTCTGCNTTCGCTCACCTTGTGCTATGCCATCTTCTCCNTGCC  
CCTNCGGTTGCTCGTACCACATTCATCCTCCTTTCTTNAAGGAGGGGTTGGGCCGCTATAGNCGCGCCTA  
AGGCTCGACCAGCCGCTNGTCTNCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCTGTTTTACCCTC  
CTCCGCTATCCTCGATACGCAATGTAGGTGCAACATTCCGNATTTGTGAAGTTANNCGCCTGCGTCCCCCTTA  
TACATCGCCACGAGAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGGC  
CGTTTGNCTTTGCGGGAACNCATGCTGCAAGCCGCGGAGGTTCCCGTGANGCGGGTGGTGGGAGNTCCC  
GTCCGTGACTCACGAACATTTTTTTCGGCCCCCTTTCTCGCTCTAGGCCCTTAATTGCAANCCCCGATTCTGGG

TCGGTTTGTAGTGTTATCACGCCTCGCCATGGANTAACCTCGTANCCTCATCCGACCGTTCCGGGGACACCTCA  
TGTTCTGCCATATGANCTCCCGNATATTAACACTCCTCAGCTCNCTAAACTGTGGCACAGTCCGTNAGCTA  
GTATCCCGGTGACGATCCATATAATAGCGCTTTCCTGTCNNANNTTGCTCCACCTGGNGAGGCGGNCGCATC  
ANGGGTCCGAGGAGTGGCCTTGTACTAGGGCGCCACACTCCGACTCTGGGACGTNTCATCAATGCGGACT  
GACTCCACGCTCCTCCTCGCAGGTAATCNCTTCGGTAGTAATGGAGTGCCGGTGCGCATTATTAGCACGCTT  
ACTTACGGAGGTACCCGTGCTGAGCGCTAGGCACGGTCGTGGCCNTCGCAACCTGCAAATATGCCTTTCAGTA  
GCCCNCAGCTCCCTGAGACGGCGAGACCNGTGAGGCAGNCCACCGCTTACGTTTAGACCACGGCCGAGCGC  
GTCCNNAGAGTTNGCTTACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCCGTANGATTGCT  
AAGATATCCATTNCGCGNGTCGTGCNCTACAGGNTACGGGTCTTTCAGGTGTGTGGGTACATTATNGAGT  
GTAATNCTGACCACCGACCCTACCGNACAGGGGACTNNTCAGTGCAATNTCCGACCGGTGGCGTCTATCCCCT  
TNTCCTNACTTTTGTCTACCTCGATATAATAACATAGGGCCGGTAGTCAATTCTCCNTACCGCAAATCGTCAT  
TTNNCTTGTAACTTATAAAGGTGCGTNNTCGGGAGGNTAGATACACGTTCTCTTGAGCCCCTATCCTTTC  
CGCATAACNAAACNGANTAGTACCCTTCGTATCGACAGAGACCGACGCCAAATCNAACANCAAGTACTATTCC  
TCNTNGTTCGCATCCNGNTTCGGTTCCTCTTNNAAACAACCAGATACGCTATTTGTCCGCAACGCCATCCTATAA  
CGCACGTNATCGGNATGGGTCTTGCCTTCGTCCCNATAGNNTAAATTTCTNGNGGCCCCNGGCACTGCCTA  
CAGATTACTAATGATGGAGCTTACTCGCTTATCCTCGCCAGGCAGTTCAGCTAAATTANCAACNCTNTTCAGG  
TTCTTCGTGCCNGGTTTGGTTTGGGTCTCCTTCATATCATTTATCTGGCGTNTCACGGTCTCGATGCNANGCC  
CACTGCATCCACTATCGCTTTTNCGAGAGTAATCATTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTG  
GCTGCTCTCGTTTCCGGGGCTGTCCCTAATAGATNTACTGCATCAGAGTGCTTCTGCTGGTGTCCAATCTCAT  
NCACTATNNGTTCAGATGTTAGGTTCCGGTTCGTAGTTTTACTCGCAACNAATCACGGGTCTTNNACCCTGCG  
TATCCTNCAAGGCGTTNCGGTGGGGCGCTGCGTTAGANCGAACGNTCNCCTAAACCCTCGAACACAAGCT  
AGNCTCTCATTCTAGGCGCGGATTTNCCCTTGAGCTTTCAGAGCTANTCCGGGNACTCCANCAGCATGA  
ACTTGTTTTAGATGCGGGTNCGACAATACCGAAGCCTTGAGCTAAACNNGCNATAAGATTAACGATCNTCC  
ATCACGATTGGTCACTCGCATCGTTCGGTCTAAACTATGCTGGTNTTACNCCCTAATGATCGGTCCCGTCC  
GGTATACATTTCTTCCGCCTTGGCGTGCCCCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGCTNCTCGTGCCCT  
TCCTCGCGACAACACACTCCGGCGCTCATTGCGGCGTGGCCCTATGGNTTCCGACGCCGCTACTTAAAAGT  
AGGTCAATGTCTGATTTGTACCCAACGCCCTNGCCTGCCCTTNTAGCCGTCACTTAAATCCTGAGGGCTGAGC  
AGCTGTGCGCCAGAGTTTGTACTGNTGAAGTCGTTTCGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAA  
ATCCGCGATTACTATTGAGTNTATCCTTAATCGTCACGCNGATGGTNTGTAAAACCTATCGGGACCACCCNCC  
GCATNTTATNGATACCCGCACTNACATCAGTGCTTCCCCTGTNNNCCGAGTTTCNGCACAANGCTTGAGATCG  
CCGTCGNATTTGCTCCCTACGNAAACGCGCAATANGANCGACCAAATTAAGCCNTGACCAGAGTGGNTCCT  
TCCGTAGTCTCACNACGATACCATATTATTATGCCNNGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCNAGC  
TNNTTGTAAGCTCANTGAAAGGCATTCTGTGATTCTANCCNNGGTGACGGGACGACTGTCANAGAGTGATG  
GCCCCGGCCTTACTAGCCTGCANAGCTAGTANCTGGGGNGAGCAGCNGNCTCGTCCCGGTTTNNNCTGTTTC  
AACTNTGCNCACTGACGTTTTNCGACGNTTGTGTAAGTTCGNGGATGCCTATCGCTTNNTTCTTATAAGTAAA  
CATAGGATTGTCAANGGAGGGGGTGCAGCGNCCGCGGACCAGGGCCACCCTCGCGGACNGGCTTNNNT  
GCTNNNGCCNTCCCCCAATATCTTCTTCCATTGACCCTTGATTAACAAACCCTCAGTGGTAGTGGTCCGCATTC  
CCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGNTGCTATTCNACGTTGCTCCCGGGTGNGNNGTGCC  
ACGCGATCTACCAAGTTTTGTACAGANCCGTNATGTNGNAATCCCCATTAATACACGNAACTACTAGCTTAC  
TGAGTTTCGACCGGCGGCNACGACGCTNCNCCCCCGCCGTCGCCCACTGAAGGTGGCGCATNCTCTACA  
GAGGCTCTGTCTGGGGTCCCTCCCTTNTCTATGAGTAAATNNNNCATTAAATCAGTGNCGCCATTGGAGGTA  
CGGATTTGCCGNACGGATCTTAGCTGTGCCCTTCTTTCCACATCCCCAGATTACCCNAATTGCGCGCNGC  
TTCCCTAGNNNCNGNCGGACAGAGAATGTCCGTTTCTNACTCCCCTAGTGGGCGTATCGCGACCANTNAAT  
CGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGATTTAACGTAAGAAGNATGCCAGACATA  
AACTNACTGTCATCGTAAACGTGCTGACAAAANTACCATTGCCCTTATTGTGACGNGGAGATCCAAATATGCG

GGNANNNTACGCCGCTTTNNGTTCGTCCCCAGACTAGGTTAGGAACCTATCCAGTACCTCTCCGTAACCTNG  
CTNGTGTGCGCTTCCCTGCCAACTATTNTAATGGCGNNCANNATTNNACCGCTGGGTAAGGCGCAACTTGNNG  
AAGTGTNNTGCGGGCGCTCGACACCGGGCGGGGACTTTATACGCGCCCCGCTGGGCCCCGTCGCCGGAGA  
GCGGATAGCTNCTATAACCCTGCAGCCACGCNNNGTCACTACNCCTCANNNTTNGACCTCTCGTNNAT  
GCTGGGGAGNCTNNNTGACCCGAGGGGNCCNACGTACCTANNNNNNNNAAGGCCANNNCNNNGN  
GNCTTNAATCNGGGTATTTGTCCCCCNNGAANNCTCGCNTCGGNNATTCCCCGCACCGCCACGTGTGGGA  
NNNANNNNNNNTNGGCGTGTCTGCGNGCNTTGGCCACCTGGACTTGNNTNNGACCTCGATCGGTCAA  
GCGAGGGGTANCCCTGCACATTTTCTCTNCCCACACAGGGGAAGTCTCCTCCGTACGGGAGAAGAATA  
NTTTCANGNTTCGCCGTACCCTACGTGATCANGCTCGCCGGCTCTNCCCAGCACACGTTGGCTAACCGCTCG  
AATTAAGCCCCTCCCTCCTTATCCCCTCAGTCTCGAATCTCCCGTCCATCATGTCCTCTCGACNCCGNTTN  
TNGACGATAGGNTTNTTANGAATCAGCGGTGGCCCTCCATCACGGNNCCCATCGAGTGTGACNGGAGC  
GTGTTTNTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCAGCGGAACCAATTTGTCCGGACAACACTCAA  
AAGTCGTGTCGGGGTACGACNCCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTGACCCATCG  
CTNGGACCACTTNTACTNCAGTGATCCCAANACCGGTTNTNGATGACTCGTTTACTGNAGGCCNCTTCT  
ACCTGCGCTCCGACTCTTGNNNAGTCNCCTATGNTACATNNNNNNNNANAAACGAGTCNAGTCCGAGCG  
AGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTNNTGGCCATCCAGCTGGGATTAGTCGTGCCGN  
NAGGCTTNTTCCCAGTGTGGCCAGGGTGTGTTTGTGACCTNNNTCCAGATCATTAGCCGNTANAT  
TGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCTATTTGGTGATACAGTCCGNNGTCTACNCCANNGTAT  
TTGNACCATCAAGTCGCCGTCACAAAGAAATACCATAAACCCCCCAAGCGCTGNGTGTAGTNNCGCTCT  
GTTTTAGTAGNTTCATATCGTCGTTGAGCNGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAGTGT  
ACTCGCCATAACCCCTNTGCGACATGAGCACCCNTNCCAAAGAGTNTCTAAAGCTTTCTAATTNTCTTTTCGCTG  
GAAGACCATAACNAGCTNCATCGGCGGTGGCNGGCATGCNCCCAGCGGCGTGTNTNTGTANTCCTGAGCAG  
CTGTAGAAGGTNTCGNTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCCGT  
TGGTCACGACGACGGCAGGTCTGGCCCCGGCCATCGCTGGAGCCGCCGCTGATGGTNCATCCGCGNGCTC  
ATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCNTCCNCTCTGCT  
CCTCCTNGTCTGCGTCTGTGNATCCTTATGCACAGTNNNAACGGCTGACTCANGGTAGCATATCGAATATNCC  
TGCTTAGCACAATTCGTAGCATCNTNCTTCTACCCTCATNNACTGTTCNAAACATCCNATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCANTCAAGCGACCTAATNTACNGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCACGCGCAGCGTANAAANCAACCGGCGCTTATCCGTGNTACCTTACTCACAACANNACCATGN  
GGATCTGNTATTCGGGCCGGTCTGTNAGGCTGTTGGGAGTGCGTGATATNTGTTAGCAATACATGGGGAGA  
ATCTTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTATAGGANTGACCGNNATTAAGTTC  
CTTCATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCNGNTGATTGTAGCTCGGGAACAGGTC  
AAGCTGTGGGNAGTTGGCTAAGAATTGGATNGAGGTTGGCCTGGTCTTTCGCCGAGCTAAAGAAACC  
GGGAGCGGCAAAATATTGCTTTGTATGTGACTGCNGGTGATGTCGCCCATGGGGCGGCTAGTCGACTCCTAG  
AATAACACGGCNGACGTTTTGNTGAACGTTANGGCGGGTCCNGTNGAGGAAGACCTCCCATTACAANAAC  
GGTCCCGNAAACCTTGTGGTAGTCNNGGAGNAGCATGCGGGCTGGACCGGCTACCAAGCGTTGGCACGTCA  
CCTACCCCGGTGCGGCTCTACGGCGATCGTCTACTGCCAGGTGNCGGTACCGGCNNGACACTCTGCCGAG  
TTGCTAAACTGCCCTCCGGTGAAGGNTTTTGGTGCTACTCTGTGTACCAGGGGGTTATTTACCATTTGTCC  
AATNACATTCCGCTGGCCCCCANNTATCGGTAGTTGGTCCAGGGGGCTCCCATGATTACGTGTACGTGCC  
CCCTCGCCATGTGCGATTTGGCTCNACCCGCGNGGGCCATCTNNATATCNAGCCTAGACCCGAACACCTA  
CAAAGAAGGAACCACCGCNAGTTGCGTGACGGTGGTGCTCCCTCAGNCACCCTTCTAGTCACTGAGTACGA  
TATNNGGATAGTTCATAGGCANGTATANNCTACGCANCCGAGTNAGCAANNCCNCAACCTTNTNCCCGCTT  
TNGGGNNNAGATTTGGGGGCTCNCCGTTCTGCGCGCGTATAGGCCAGGAAGTTGCGAGCATAACGATAATCT  
TTTCAAGGCTTTTTNCTTGGACTCCCTATTGTGTCACTGCGGGCCCTTCTTATGGCTCCGGTCCGTGAGCGCGCT  
GNCTACATCCATNCCGGTCNCTATACNTTAGTCGGATCCTGTTGCGTGGCCTATANNNGAAGNTGGGGGNAN

NAGGGATTGCANGGCAGCGNGAGGTGATGTCCAGGGGCATGGAGATTATCCCTATCAGTGGGACATGGGAT  
CAAAGAGCGATANAANTGAGCGGAATTACAATACGTNTCTCACGTGTAACCTATAAGTCANGCTTTGTC  
ANTGGTGAACGCTTCGGGTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTNNCNNTACGTTGCGCTGG  
CCGCCGNGGTTTTTNNGCANTTCTACGGGACGCACCGNCGTTGTGACNGTNTGACCCCATGATGGGGAAA  
GCACGGCCTAGCCTGACGGATCCAGTCGTCTAACCGGATTNTAGTTCGCAAGTGGAAAGTGCCCCGTGNGN  
ACTTCTCTCTNAGTAGAGCCCATCAGTCCGATCACNNGCCGATCTGAATCTTGGCTAGNCGCGCCNATNCGT  
TCCCCGATATTGAGCGCTTTAATCTNNTTNCACCNTTGCCGTGCATGCTGTCCATATGCCANCAAACGCATNCAG  
GGTTCTGNGNTNCGAAGAGTTGANNTANGTCTGCCGTTCTATTCTTATCCAATTTGCNTTTCAGCGTGCTGG  
NTAGTAAAGTGGCCTGCGAACGTCAGATGGGCCGGCCACTGCAACTAATGTCCTAANNCTGACGGTTGGGCT  
NNTNAGAGCNCAATNCACAGTGAGCCGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGNGTCCACGTGCT  
CCANNNGGCATTGGGTGNTNCNNAACCGCACTCGGCAANNGCAGCTCTTGTANGGCTGGGAAGGTTGC  
AAGAGACAGTTCAGCACATGACATTCCGCCACAAGNNTNCCACNCGCGNGGTAAAGTAGGGGGACAGCC  
GAGAAAGANNNGGTGCGAGTAGGTCCNNGTNCGAATATGTTAACTTTGGAGCATGCTTATTGCACTCGGG  
TTGGGGATCTTCTATACTCAATCTGNANCTTCTNAGCGAGNATTACAGCGCTAGTGATAATCACCTCCA  
CGTTCTGCCTCGCTNCGNACTCGTAATATGAACAGCCGGCGTGCGCCGTAANCTACACAAAAATCTNTAGG  
GTATTGCGCGAGCAAGTAACGACNGAACGAATACCGGCGNGGCTANTCGTCTGTCTACTATCCTGTACTCAAC  
TCAGCCGNAGACGACGGACAGGGTCCCGGGCGGGAGATGGCGTGCAATCCTCGTACCGAGAAGTNGGAAG  
AATCACCGTATGGGGTNCGAACGCCGATAGTGGCGCCACNGNNGNCCCAAGGTGCTTNGATAATTCCCGG  
ACGCGGGTATCAACAGCCGACGGGTCTTTTGTAGTCCGCCGNGNCACCGTGGCGNGGATNCGAATTTGTCT  
CTCTGGTCTAAAAGGGTCGGCAACCGACGGACTGACGCCGGGGGGGATATTACCATTGTGGACCGGACATAG  
CCNTTCAATGGGCTNTNNGCTTCCAGGGCTCCGTACAGTTGGCGATCTCANNNTGTGCGAGGNGTTGAGGATTA  
CTGAGCGNNGAGCCAGCGGCCGANNACGGATCGGTGTGAGATCGACGTTTATCGTGTGGAAAAGANTAGG  
GTGCTAAGGGGGTTCCACCGCGACAACGAGNCGANTGTGTGCGAGTAGATNAGGCANATGTTGTAGTGCTA  
GGTNCCACGCCCCAAGGCTCTCGGCGCAGTGNTACATGTACCNTAGGCAANCCGCTTGNGTGGACGTNTAA  
GCAGAAAGGGGCGACGGGGACAGCAGATCGNACTCAGACTCGGACGCAAGCNCAAGGTNTANNGNANNANAT  
CTCGCNCGGGGGGCAAGTCGGATGAGGTTGCCCGANNCCNACGNCCGACAGTAATTTCCATNNGNAAACCN  
TCCNCTTGAATCTGTACCGCTATTCNNGANAGNAAGNAAGTACGAACTAGACGGCCCCGTGTCAAAGACNG  
CGACAGNNAGGNNCNGGATGATCAGTAGCTACNGGGTACGCCTCTCANACTATGGGGGNGTAGGGGGCCT  
ATTAGATGAGGCCCTCACGTCTCCCTANNNTACGNCNACTGAAAGCGGGTGTGCAACGTATAGGCCGCTAGA  
GGATCTACGGCGTCTGTCTATACTACCNCAACATAGCATGGTAAGCACTNAAAATCCATTGCCANTCGAACG  
GCGGCTAAGTNNGGGGCTAGGCCTTGTACGGTGTATGTGTAAGTGGNCCNCTTATCTGGNACNANNNNNT  
GCCAGAACCCCTAGTACGTGGGNGCAGCCTCNAAGCCTTGTATTTGTNNGCCGNATAGGAGGGGTCCGCA  
GTCGGNCCCATTACCAACGACGCAGACCAAAAGAGGGCTCGGGTAGAGCGCTGNACTNTGGGTGAGANG  
ATCNTCGTNACCCNNGNAGCGCCATACCCCAAAGAGTTCAATGACCCATGTAGACAANTGGCGANGACTC  
TGAAAACGGCGNCGTGTACNATTCACAAAGAGCCCTANCCACANNNGGGCGGAAGCAGACTTGAACCAACTT  
CACTGGGAACCAGAAAGNACGCGTNCNNGCCNTGACTATCGACCCGCGNGCTANCAAGNAAGCATCCCN  
ANNATCATGTCCAGTATACCCTCTTTGTTNCTCTCTGGGTTGNGCGCTTGGTCGTAGNACNATGTCANGTT  
AATTGAAATCGATATCTCGAACCCAGGCNACCGGGCAATACAGGGGACAAACACACGGACTCCACGCCNNCN  
TTTTGACTGNATCGCGACCTACTTGNCCGATGTCATATAATAAAAANGAGACCGGGCCCTACAGTTGTGCTN  
AAATGGACTTNTACTCGACCACNCTGCGAGTACTACCGCTACGTGGCCATTTCCCACTGGCACAGGCAGCGC  
CTGGGGTAGTGGCACNAACGTTCTACGAAAGNGTCCNCGTCTAAGGCCTTCAAGTTGACCGGTCAAAGGTC  
CGGCNGTNGGCTACTAGAGGACCATGCAAGGCGATCGGAGNCCNNTNNAACNGCTCTTCNAGACTATCCC  
AAAGCCTCTCTGGGNNNAGCAGGAGNTTAACTGTCCCGATTCAAAGAACCCGNNATCGGGGACTAGAGAG  
AAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAAAGTAGCCGGGGCCGGACGGAAC  
ACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCANCTGGNNNNGGGCTGGCAAATTAC



GAACATCAGTGTAAAGGAGCCTAATTAANGCGAACGCAGGTATCGTTCCTNNCGCACATGGCCGACTTCACC  
ATTANGTCACAAGNAGGATGTCAGACCCNGAGGTGTAGCGAGCGNGCNGGAATCGGATCGAATGAAAAAG  
CTGTGCATCCGGAAACACCGTCTTAAGAATCGNNAATNGAGGGCGCTGACAGCCATCCACTGCCGTGGCAAG  
TGTNCGTCNTNCTNCCAAGCGGTCCCAAGTAGCCTANNGGCGGGGATAATAGGTGTAGGAGCGACAAGCN  
NACTGGGGCTTCGGACATTGATGTGGCTGTACNGNCTGGCCGTATACTTAAGTTCAGATCGTGACCAAG  
AGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAATTTAANGNNANGAANCCTTCACAAAAT  
GGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGNNAAGNCCGTAAATAACCAANAGTAGAAAAANG  
NCCTAGTGGCAACCGGGACAATCAATTGACNAGGGGAAAAAGCGAGCGTCTCCGCCACCAATTGCCTTCGC  
GAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATNAACGACGAGACCCCGTGAACCTCGGT  
AGCGCAGTNGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGTGCAGANGAGATCATCC  
CTGTATTAGTGAAGTAATTGGTGCATTAANACACCGCCGNTTAAAGTCAGCGGACCAAAAAGATAGNGACCAA  
AGTAGGTTTGTACAGTTNATAATNCAACGCNAGNGCTGGATACGAAGNAACGCCTCTCGAAAATAGTGAG  
GTACGCGGGGAGNTGTNTCAAGTCCGGGGGGCGTCTTNGGAATCGCGGGTGTATGCCCTNTGAAGGGAGA  
TGAGGAAGGAACAGCGAGCNGNNTATCAGTTGAAGTTATAGGTCAGGCTCNGGCCGTAGNGAGAATACTGC  
AGATCTGAGGAAAANCCACGCGCTANTACCGGTGAGGAGCGCTGTAGAGGAAGACTAATNCTGAGACGCC  
AAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCTNCCGATGAGGAGTGCACGAGAGGGGACTTCT  
GCTCCGGTCCAGAGCAATGAATCCGAGGCNAGTGGGGTAAAAACACGGAGAGNNTGNGACGGGTGGCGTT  
CCTGGGTAAACAAGGAAGGAGCGGCTCGAGCGGTCCATGAATNAGGTTGATGTCAAAGTACNNGNAGACCA  
ANNGAGGTGGTGCTGGACATAGATTAACACAGTGCCGCCANGGGTCCGTAGGTGCGTGACCTNNANNGAG  
AANATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACNGCGAAGAGGGGT  
AGCGGACCAAAGAGAGTGTCCGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTATNANCGATAG  
GNGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTGTGTGTTACGGTGGTGGCCAGCTGNGGTTT  
GCGNTGTAACCCGACTATACTAAGAACCGCTNNGNCTGACCAAGAAGGCGACGCAAAGAAANCAGACCC  
CCAGTGACTGGTGGCGTGTGTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTGTTACAGCAGG  
GGGGCACCATCTCCCTAGCTTGCCTGGCCATAGGAGAGGCTNTGGCGTCCAATTAGGTCTTACACCCTGCC  
GAACCGCANCCGGGAGGCCGCTGCANGCGGTTCTGTTACGCCAGTGAATNNNTNAGACNGATTGCGCAC  
GCTTTGTATCATGCCGNNGGCCAACAAGTGGANCAAAACGGTAGGCGAGGAACAAAGTTAGCTATCCATGAT  
ATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGGAGGATACG  
GGGGCCCTTGAATCGAAAGAAGGGNGTGGGGAGTATAGTAAGAAACCTATGTCATGNACGGGGTAGACCA  
AGCAAGCTCCNTAGGAAGCGAGCCAAGTANAAACAGCCCTAAGGGCCAAGCTGCCGATTGCCGCTGCTAN  
GCNAAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAGCTAGANGT  
GCAAAGCGCGTACGGNTCAGTGAATCAATACCCCTAAGACCAATTTTAAAAGCCATTATTTGGTAGTCGCGA  
CAGAGGAACTGTCTGNNCCGACAGNNTGGCGNAAGGCAACAACAGGAAAAGCTGGCGAAAAGGCGGTGAC  
AAATTTGCGGCCGANACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGGCGCNGAAT  
AGTGTTACANGCCNGAAAGCGAGTTANACCGGGAGGGANTGGAGCANNAGANCATGGNTATTATGAGGGAT  
CCGCTNTCATTGGGACCCTNCTCATGTAANTAGTGTGTGTGGCGAGACGGCNNTCTTCGGCACCANAATT  
ATTTGTTGTCGGACGTTAATCAGCCTNGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTTAGGGGG  
AGCTGNGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCGTGCTGC  
GCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCACGNGGGA  
NTCCTCGCCTGCGTGTGTTGGGCGGGTGGTTCCATCCNAACCGCCACGTAGCAGAGCAAGAAGTTGCTTGT  
AACGACTTGACCGANGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACNGCGAGAGCAGCGTAAT  
AGAAGGGNGAGAGAAAGCGCAGACNGTNCGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGTGCAT  
GAATGCTGCCTTAGCAAAAATCTTAAAGATTGTCGCGACGATTTAGATTTGCTGCCANGAGNATGAGGGTG  
GGACGGCAAGGGTTAGGGTCTTAAAGTGTTCACGCCAACCTGACGAATAAAACGGCAGCCTGCAAGNA  
TTATGAGATGGACAGCTCCCGGCGCTGCGACCTCTGCGGCCAGGNTNACNCGGTGAGGACTTTAATAGGC

GGAGGTCCTGCNNCTCACTTAACGCAGGATACGATNNGAGGGCGGAAATNTCCCGTTATAAAAATCCANGCTN  
AANGAGTGATCAGAGCGCGAACNAACGACTCAGGATTCCGGCAACNGTAATCCCNNAAGCGGNGTCAGTTG  
GGGAACAGCGTCGCNACCCTGTATNNTGCCCATACGCTTGTGGGGATCGGCCGAAGTACTATCANGCGAG  
GGGGAGGCAATCNTNTCCTCCATGCCCTTTANAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACCTTCGTAGTGGGTAAGTATCGAAACNAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAANCCTNNCGNNGCAAATTCGGCGAAAGGCGGTCATGATAGTATATGGGGCGG  
GGTGAGGGAAAATGTAGCANNCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGNCGAAG  
CTCATTGGGACAANNATGAGGGGNGGGCACCTGTCAGTTTCGTTGAACGTGGTACCATAGACACGCAGACA  
AAGANACCCATTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATG  
GCNGCACATGNATAATTNGAAAGAANGTAGNCCAGGGAAACCGCAAGAAANCCAGCTACCCCGCTCCAAG  
TGCGACCACGTTTGGTGTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGNTCTTGGC  
ATTTCAAGCTATCTTATGCCNTACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGG  
CCANTGGCATNAAAAAATATCTCGACCGGGNGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGG  
GGTAGAGNAGCGAGNAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATNGTNN  
CCATAAGCANGNAACTTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTNATCATNTACCC  
GCAGGGGGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGA  
CTGCTTAATCTGANGTGCGAACAGACCCGTGNCCTGNGCAGGGTTGCACGAAGGAAGACTGGGAGAAAGTC  
ACGCTATCAGGAACTATGTCAGTATACAGGGCGTNGCCTAAGAACGAGCCCAGGATGGGACTCAACGCN  
AGCATCAAGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCT  
TCGCAAAGGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGA  
GGGGCGGAAGAGTCCATACCCTAGNANCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTGAT  
AGCNATTTAGAATCCCTAGCCACAGATCTCGTCTTCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTG  
GCGAGTCCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGNAAGAATG  
TCACACGGAGCCGCGGAGTGCTTTTGAAGGTCANAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCC  
TCTGGCGACGCCCCGGANGNAACTATGTACGATAACAGCACCCGNACGCCTGATTGGTAACGGAGCCTGTAT  
TCTAGATGTAAAGGTCTGGAAGCTAGGGAANNNNAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCA  
CAGGANACGTTGACGCCCCGAGCGGTCGTAGTTGNGACGGGGAGGCGANGCTTNGATGTAGTAGGCAGCC  
CTCCATTTGTGANAACGCTGGGACCCATGTTTAAAGGGAAGTCCAACAAGTTCGCGCTTTGCAACTGGGCAT  
AGGAGCNTATGCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGNNACAAGGATCGTANNGA  
CCCTCAAGCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTA  
AAGTCTNTGNACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATANAGTA  
GGGCCGTCTAGCCCTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCNCACCCCTGCGCACCGNNG  
NNAATTTTCTCGGGCGGTTACCTANGGCTGACACTCGCGTAACAAGATNTTGCCAGCGGATCGCTGAGGAG  
TAGGGAATAAGTNTGCCGNTTCTGGNGCAAAAATCTGGCGCNGCGGTAGAGGCAAAGCACCCCTTGTNTTA  
NTGTGACGAGGTGAAGCGCNACGTGTTGATTGGGTTGCGNTCAAAAANGTGATNGTACCTGGTTAAACTAC  
AGGTCCTAANGCTTCTGCTCGCGGCATTTGTTGAGGGTTGTANGGTANAACCCAGGCAAAGAGAAACNAC  
GTAACGATCTNGTTNGNGCTCTTGCTATACTGACANNNGACTCACCTTTGAAAGTACGCGCGGAGNGATCCN  
CCCGCCTAAGAAAAGCGATACTCGAGTGTAGGTNGTGCATCCACCCAGANTCTAAGTGTGGAGGATACAC  
AGGTCCGAAGGACGAACAGCTGANAGTGCAAGCANNATTGGCCCCCAATGACCAATCTAGCTGGANTATAC  
CATTGATCGCAAATACAAGCAATGTNTNAGTNTCCGATAAAGNCCCAACGATGATGGCTTGCAGGGGAAAGG  
TCCGAGGCGGTCCAAACGTCTCCCTTCGTGGTAAACTGTNCCCAGGATCNTTNTCCNCNCGTAATGAGGAG  
TGTNGGTGGAGACAGTAGGNAATCAACGCGCTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCC  
CAATTTTTCGCAAGAAAGACTAAAGGTCGAGCAGGCGCTGGGANGTGGATTGCGCCGTGTGGAGATAAGAG  
CCGACNCTGGGTCTAGCGGGTGTATCGAGAGAGTNAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTT  
TTCATGGAGCCGCTCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACNCCGGAGACTCCAGG

CCGCATATTCTGAAGCCTATACGGATAGATNCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAG  
GCAATCTACTTCTATTAGGGTGGNAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATG  
ATACNTTACCCGGTCAAAGCGACAGACCCNCAGACANCGTCTAACCACGACCCAGTGGAGTGGTACCNAG  
ATACTGAATTNCCAGGTCGANNANCGAGAGGAGGACGGCATNAGATGGAAAGGAGCNAACGCGAACAGG  
GACGACTCGGACCGCAGGACATGCTGTGTGAGGANCGCATAGTCGTAGAACCCNNTCTGTTTTGCGGTACT  
ANTTGGTCTAAGCACNCCGTCTGGGGTGCGCCAGAACCNTGAGTAGAGTGCCAGCAGAGTAGCTGCACATNT  
CCCTCCGGCATCGAGAAGGGNGGTTGGCGGCGTGACTACTATAACTGAGAAGTGNTCACTCTAGCTGAAGAT  
ACCACGCAAGGAACCCCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGNNACTACGTTGATGCTNCAA  
CTGATGGAGCCGGGATAGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGTGGGACGGAAACGAAAA  
TCTACTCCGACGGGGGATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGA  
TCTTNTNCTGGATGCGAGACCGATAGNNNTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTT  
GTTAATCCAAGAGGAGTGAGAGCAGGCCGACGTTTATGGTAGGACGANATGGGAGGAAAAGTATGCCTATA  
ACACCTAACAGCAGACATTGTCGGCTCCGCAGGGCCGNTACGGGAAAGAGGGGGACCAGCAGACGTTTGCN  
CGANAGACCAGCANGTNGTCGATTGCGGACTCGTTTAGGAGGATGATGANNGGGCAGAGCCCTAATGAGG  
NGGTGTGAAAATACTCTCATGTAAAGAAGAGTCTTGACACGTTTTGAGGGTTACGATTGGCNTGAGATA  
GNTACAGCGCTTATAAATGGGGCGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTCAC  
CAAGGNTCGGATCAGGCAACCAGGTCAAAGACGTCTACGGGCGCCCATGGGTAAGCGGTAATCCGTCAGC  
NTCAAAGCCTTACGTGGGTGCCCGGTGCCCAAGGTNNGTTNATGTGTCTGGGACTCCTTGTGCACGANNT  
CCCTAGCTATCCGGCTGTGGCCATNGCGACCAAGTAGATTGTAGNGAAAACTCGGAAGACGTGGTTNGATA  
GGGTAGCGTCAAAGGCCGCTAAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTNCTGA  
GGAGGCANCAATTTGGCTTTCAAAGACGATACGTAGAGCTGAGGTGNNNTTTGTTAACCAAGTAACAACAAG  
AAAGCTACGCTGTATCCGAATACGACCTTACACGGTCCGGTGTGTAGCAGGAGGTTGCGAGGTCTTNTGATGA  
GGCTGCGAACGAAGTAGACGGCTCACTATTCGATGGGTGCCNGGGGGCGCGCTCACACGGCGTGGCCTTT  
GGGCTGCTCTGGACTAAGGGCAAAGGGAATGGACCCNNACGATTTGTGTGGAGGTGCTCTCNAAGCAACGA  
CTTAGAGGAGCTCCCGCACTTACTGGCCGTACTATACGGNCGAGACACAATTCTCCCTCCACCGTATAAGTG  
AGACCGTAGGGAAATNGCGAGGTGATAGTCAGTGCAGGAGGTGTCANTAGCTCAGGTGCCGGCAAGTCGC  
CGTAAAGTTTCTGTGCGACAAAGAGCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGANACAAAGTGAG  
TGCCCGAACCATGCGATCCTTGGGGGTGCGAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAG  
TATGCGANNACGCAGCTGCAGGTGGGGGACGAGCGGATTAGCCCGTTAAAATTAAGTGGCGGCTCGGGG  
TCCCGACGCATGGTATGTATTTTCATCGAGGTGACAAACGGTGAATGGGTTACGTTCCACACCGNNGGGCAG  
TTCATCGGCTACCTAGCTCGTAACGTCCGATGTACACAATAGCGAATGGTGGGTCCGTCCTTCAGGCGANGC  
ATCGTGCTACCAGCCGCCGATAAGATACCCGCAAAGAGTGCATAAAG

>P38, London\_12, VIM-2, 08.12

TCCCTCGTCTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTCTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTTCTCGTCTATTGGGCGCTTGTCCCACC  
GCCCTACTCGGTGCGGGGCTGGAAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAAACCTCAGTTTCGGGGAGTCCCTAAACATCTCAGCGTCTGCACGCGCCGGAGCCCC

GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCGTTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCCTCTAAACGCTCGAGATAGGGTTAACGCGCAAGCAGTCAGCTTTGTGTCAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGCGATCTTGCTCACGGACTCCACCTCACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGTATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCGTCGGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTCGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCAATTCTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCGGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTTGT  
TTACCACTTACTCAACTTTTAGTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGTCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCTCCACATATAGGCGTGCCACAGGACTA  
TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGCTATGCCCATCTTCTCCATGCCCTGCGTTGCTC  
GTCACCACATTATCCTCCTCTTTCTTAAGGAGGGTTGGGCCCGCTATAGGCGCGCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCACCCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCGCTATCCT  
CGATACGCAATGTAGGTCGAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTTGTGCCGGACTGGTGCGCGTTTGCCTTTGCG  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTTCGGTGCAGTTCGCGTCCGTTGACTCACG  
AACATTTTTTCCGCCCCCTCTTCTCGCTCTAGGCCCTAATTGCAAGCCCCGATTCTGGGTGCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAATTCGTAACCTCATCCGACCGTTCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCCTGTCCGATGTTGCTCCACCTGGTGGGGCGGGCGCATCACGGGTCGGAGGAGT  
GGCCTTGTACTAGGGCGCCCACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGGTAATCTTTTCGGTAGTAATGGAGTGTCCGGTGCATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTCCAGGTGTGTGGGTACATTATTGAGTGAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTAGTGAATTTCCGACCGGTGGCGTCTATCCCCTTGTCTTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTCTTCCATACCGCCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCGGGAGGATTAGATACACGTTCCCTCTTGGAGCCCCTATCCTTTCGCATACCAAACAGATTAGT  
CACCTTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAAACAACCAGATACGCTATTTGTGCGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGGAGCCCCAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTTCAGGTTCTTCGTGCCCGGTTTGGTTT  
GGTCTCCTTCCATATCATTTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTCGTTACACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTCGTTTCCGGGGCTGTC

CCTAATAGATGTA CTG CATCAGAGTGCTTCCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCCCTGCGTATCCTCCAAGGCGTTTCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATTT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACACTATGCTGGTTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTTCCGCTTGCGGTGCC  
CCCTCTCGTTGCGTTTTATTCTTGGGTTCTGCGCTTCTCGTGCCCTTCTCGCGACAACACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCACTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATTCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTCACGCCGATGGTCTGTAAAATATCGGGACCAACCCGCGCATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATACCATATTATTATG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGATGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGGCCTCGTCCCGTTTTTCTGTTTTCACTGTGCCACTGACGTTTTACGACGGTTGTGTA  
CTCGTGGATGCCTATCGTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGCAGCGCTCGG  
CCGACCAGGGCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTTCCATTGACCCTT  
GATTA AAA ACCCTCAGTGGTAGTGGTCCGATTCCCGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATCTACCCAAGTTTTGTACAGATCCGTTATGTCGAA  
ATCCCCATTAATACACGTA ACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGCTTACCCCCCGCGT  
CGCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCCGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTTCTGTTCTGTCGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTTCCGTA ACTCGCTGGTGTGCGGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTA AAC  
GCTGGGTAAGGCGCACTTGC GGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCTGGGCCCTCCCCGGAGAGCGGATAGCTCCTATAACCCTGCAGCCACGCGGCGGTCACTACGCCTCC  
CCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTTGACCCCGAGGGGTCCCGACGTACCTTACCACCTT  
AAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGTCCCCCCCCGAAGTCTCGCTTCGGGGATTCCCCGCAC  
CGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGGCCACCTGGACTTGAGTCACGACCT  
CGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGGG  
AGAAGAACTATTTTCATGTTTCGCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGCT  
AACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCTCTCGACC  
CCCGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGTGAG  
CCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTTGTCCGGACA  
ACACTCAAAAGTCTGTGCGGGGTACGACGCCCTCAGTAAGACTCTCGCGCTTGTAGACGGGTAACAATTTG  
ACCCATCGCTGGGACCACTTACTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTACTGTAGGCC  
TCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCCG  
AGCGAGCCAGCATCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTGC  
CCGTGAGGCTTCTTCCCGCAGTGTGGCCAGGGTGTGTTTGTCTGACCTCCATCCAGATCATTAGCCGATA  
CATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCGAGTCTACTCCAGGG  
TATTTGGACCATCAAGTGC CGGT CACAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCGC

TCTGTTTTAGTAGCTTCATATCGTCGTTAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTAG  
TGTA CTG C C A T A A C C C C T G T G C G A C A T G A G C A C C C A T G C C A A A G A G T G C T A A A G C T T T C T A A T T C T C T T T T C G  
C T G G A A G A C C A T A C G A G C T C C A T C G G C G T G G C T G G C A T G C C C C A G C G G C G T G T T A T T T G T A C T C C T G A G C A  
G C T G T A G A A G G T G T C G G T G T G A T G A A G A A C C C G T C C C G T G G A T T G G G C G G C G T A G T G G C T T A C T A T T G C C G  
T T G G T C A C G A C G A C G G C A G G T C C T G G C C C G G C C A T C G C T G G A G C C C C G C T G A T G G T C C A T C C G C G T G C T  
C A T G C C T T T C A T A T T A G T C G A G T C A G G C T C T A C T G G C A G C G A T T T C T T T A C T A C A A C A A T C C G T T C C G C T C T G C  
T C C T C T A G T C T G C G T C T G T G G A T C C T T A T G C A C A G T A T A A A C G G C T G A C T C A A G G T A G C A T A T C G A A T A T C C C  
T G C C T T A G C A A A T T C G T A G C A T C A T G A C T T C A C C C T A T T A A C T G T T C C G A A C A T C C A A T G A T G C T T T C A G G T  
C A C T A C G C G C T C C G C G A G C A G T C A A G C G A C C T A A T T T A C T G C C T A T C G C T C G A T G A C A C T C G C A G T G G A C G T G  
C C C T T G C G C A C G C C A G C G T A C A A A T C A A C C G G C G C T T A T T C C G T G C T A C T T A C T C A C A A C A T C A C C A T G A G G A  
T C T G T T A T T C G G G C C G G T C C T G T T A G G C T G T T G G G A G T G C G T G A T A T C T G T T A G C A A T A C A T G G G G A G A A T C T  
T T G G T A C T T T A C G T A T T C C T G C T G T T A G A A A T T T T A C A G C G G T T C A T A G G A T T G A C C G C T A T T A A G C T T C C T T C A  
T A C C A C C T C T A C C C T C A T A T T G A T C T C C C C A G A T G A T T T C C C G C T G A T T G T A G C T C G T G A A C A G G T C A A G C T G  
T G G G T A G T T G G C T A A G A A T T G G A T G G A G G T T C G G C C T G G T G C T C T T C G C C G A G C T A A G A A A C C G G G A G C  
G G C A A A A T A T T G C T T T G T A T G T G A C T G C G G G T G A T G T C G C C A T G G G G C G G C T A G T C G A C T C C T A G A A T A A C A  
C G G C C G A C G T T T T G G T G A A C C G T T A A G G C G G G T C C T G T G G A G G A A G A C C T C C C A T T A C A A C A A C G G T C C C G G  
A A A C C T T G T G G T A G T C G G G A G A A G C A T G C G G G C T G G A C C G G C T A C C A A G C G T T G G C A C G T C A C C T C A C C C C  
G G T C G G C G T C T A C G G C G A T C G T C T A C T G C C A G G T G C C G G T A C C G G C G G G A C A C T C T G C C G A G T T G C T A A A C  
T G C C C T C C G G T G C A A G G G T T T T G G T G C T A C A C T C T G T G T A C C A G G G G G T A T T T A C C A T T T G T C C A A T C A C A T T  
C C G C T G G C C C C C A T C T A T C G G C A G T T G G T C C C A G G G G C C T C C C A T G A T T A C G T G T A C G T G C C C C C T C G C C C  
A T G T G C G A T T T G G C T C C A C C G C T G T G G G C C A T C T T C T A T A T C C A G C C T A G A C C C G A A C A C C T A C A A G A A G G  
A A C C A C C G C A A G T T G C G T G A C G G T C G G T G C C C T C A G T C A C C C T T C T A G T C A C T G A G T A C G A T A T T T G G A T A  
G T T C A T A G G C A T G T A T A A C C T A C G C A C C C G A G T T A G C A A C T C C T C A A C C T T C T C C C C G C T T T T T G G G C T C T A G A T  
T T G G G G G C T C C C C G T T C T G C G C G C G T A T A G G C C A G G A A G T T T G C A G C A T A C G A T A A T C T T T T C A A G G C T T T T T A  
C T T G G A C T C C C T A T T G T G T C A C T G C G G G C C T T C T A T G G C T C C G T C C T G A G C G C G C T G T C T A C A T C C A T G G C  
G G T C C C T A T A C C T T A G T C G G A T C C T G T T C G T G G C C T A T A C A G A A A G C T G G G G G C A C C A G G G A T T G C A C G G C A  
G C G C G A G G T G A T G T C C A G G G C A T G G A G A T T A T C C C T A T C A G T G G G A C A T G G G A T C G A A G A G C G A T A G A A C  
T G A G C G C G A A T T A C A A T A C G T C T C T A C G T G T A C T A A C C T A T A A G T C A G G C T T T G T C A C T G G T G A A C G C T T C G G  
G T G C C G C G A G G A G T G T A G C G A G A T C G C A T C A G G C C T G T C C C T A C G T T G C G C T G G C C G C C G C G G T T T T T G C G  
C A A T T C T A C G G G A C G C A C C G G C G T T G T G A C C G T T T G A C C C A T G A T G G G G A A A G C A C G G C C T A G C C T G A C G G  
A T C C A G T C G T C T A A C C G G A T T T T A G T T C G C A A G T G G A A A G T G C C C C G T G A G C A C T T C T C C T G A G T A G A G C C  
C A T C A G T C C G A T C A C G T G C C G A T C T G A A T C T T G G C T A G A C G C G C C C A T A C G T T C C C G A T A T T G A G C G C T T T A A T  
C T A T T C C A C C T T T G C C G T G C A T G C T G T C C A T A T G C C A C C A A A C G C A T C C A G G G T T C T G C G C T G C G A A G A G T T G  
A T T T A T G T C T G C C G T T C C T A T T C T A T C C A A T T T G C G T T C A G C G T G C T G G C T A G T A A A G T G G C C T G C G A A C G T C  
A G A T G G G C C G G C C A C T G C A A C T A A T G T C C T A A T C C T G A C G G T T G G G C T T C T A G A G C C C A A T G C A C A G T G A G C  
C G T G T G T A G A G G G A A G C C C G G G A G G G A C G C G T G T C C A C G T G C T C A T T T G G C A T T G G G T G G T A C G A A A C  
C G C A C T C G G C A A G C G C A G C T C T C T T G T T A C G G C T G G G A A G G T T G C A A G A G A C A G T T C C A G C A C A T G A C A T T C C  
G C C A C A A G C T C T G C C A C T C G C G T G G T A A A G T A G G G G G A C A G C C G A G A A A G A C C A G G T G C G A G T A G G T C C C G  
G T T C G A A T A T G T T A A C T T T G G A G C A T G C T T A T T C G C A C T C G G G T T G G G G A T C T T T C T A T A C T C A A T C T G A A T C  
T T C T C T A A G C G A G G A T T A C A G C G C T A G T G T A T A A T C A C C T C C A C G T T C T G C C T C G C T C C G T A C T C G T A A T A T G A  
A C A G C C G G C G T G C G C C G T A A A G C T A C A C A A A A T C T A T A G G G T A T T C G C C G A G C A A G T A A C G A C A G A A C G A A  
T A C C G G C G A G G C T A G T C G T C T G T C T A C T A T C C T G T A C T C A A C T C A G C C G A A G A C G A C G G A C A G G G T C C C G G G C  
G G G A G A T G G C G T G C A A T C C T C G T A C C G A G A A G T C G G A A G A A T C A C C G T A T G G G G T C A G A A C G C C G A T A G T G  
G C G C C C A C T G A A G C C C C A A G G T G C T T T G A T A A T T C C C G G A C G C G G G T A T C A A C A G C C G A C G G G T C C T T T T G A G  
T C C G C C C G C G A C C C G T G G C G A G G A T C C G A A T T T G T C T C T G G T C T A A A A G G G T C G G C A A C C G A C G G A C T G

ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGCTCCGTAC  
AGTTGGCGATCTCATCTGTCGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGGCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTTCCACCGCGACAACGAGGCGA  
CTGTGTCGCAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGCTAGGCCTTCGTACGGTGTATGT  
GTA CTGGGCCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGCAGTCGGGCCGTATTACCAACGACGCAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTCGTGTACGATTCACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGC GTTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCTCCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTCGTAGGACGATGTCACGTTAATTGAAATCGATATCTCGAACCCAGGGCAGCCGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAAC  
GAGACCGGGCCCTACAGTTGTCGTGAAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC  
CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTCCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCGAGGTGTAGCGAGCGAACGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACATCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATAG  
GTGTAGGAGCGACAAGCCAACCTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACACTTAA  
GTT CAGATCGTGACCAAGAGCCCCGTACGTCCCCCGATGCCGAACCAATCCAATAAATTTAACGCCAC  
GAACCGCTTACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAAC  
CAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAGCGTCTCCGC  
CGATCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGAG  
ACCCCGTGAACTTCGGTAGCGCAGTNGACCTTCCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATGT  
GCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACCA  
AAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCTC  
TCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGGGCTTTAGGAATCGCGGGTGATGCC  
CTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGTA  
GGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTAA  
TTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCGACGG  
AGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACGGAGAGGGTGGG  
ACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCATGAATCAGGTTGATGTCAAAGT  
ACCCGTAGACCAACCGAGGTCCGTGCTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTGA  
CCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCGC

GAAGAGGGGTAGCGGACCAAAGAGAGTGTCCGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGTA  
TGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTCCGCGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTGT  
TACAGCAGGGGGGACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCGAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTTCAGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTCCGGCAACAAGTGGAGCAAACCGGTAGGCGAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAAGTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTCGGCAT  
CAGAATATTTGTTGTCGGACGTTAATCAGCCTCGTGAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGACAAACGAGGGTACAACGCCGCGTATGAGAGCCACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTTCATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG  
CTTGTAAACGACTTGACCCGATGAGGAGAGTTC AATTGACCAAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTCGCGACGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCTGTTAAAGTGTTCACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGGAGACTTTAATA  
GGCGGAGGTCTGCCACTACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCAACAACGACTCAGGATTCCGGCAACCGTAATCCCGACAGCGGCGTCACT  
TGGGGAACAGCGTCTGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTCTGGGCTAGTTGCCCTTAGGCCGTGACTATGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACGTGGTACCATAGACACGCAGACAAA  
GACACCCATTGTCGCTACAGAGGTGTCTCATTGTATGGTGCATACGCAGTACTCTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAACGTAGTTCCAGGGAAACCGCAAGAAAACCGACTACCCCGCTCCANGTGCG  
ACCACGTTTGGTGTGCTGAGGTATCAAATGCTTCCACGGACGATTGAGAAGTTTGGGAGGAGCTCTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTGTGGTGTAGGTAGCGAGGGCCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCAACCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCCCTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCG



GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAAAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTCTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAAGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCTCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAAACTATGTACGATAACAGCACCCGAACGCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGAATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACGCCCCGAGCGGTCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCCTGCTTAACCGGTGACGGAAGTTAAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCCCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC  
CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTGCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGTG  
TAGCGGGTGTGAGAGAGTGAATGGGGCTGGCCATTTAAGAAGTACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAAGCGACAGACCCTCAGACAACGTCTAACCCAGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGACTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCACGCAAGGAACC  
CCTCTCTGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGATATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGGG  
ATCCCCTCAAATCCGCACGCAGGTTACCCCCGCGCGCCGACTCTTGTTATTACGATCTTTCTGCCTGGATGC  
GAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTGCGCTCCGAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTGAAAATACTCTC  
ATGTAAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTTGATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACTAACAAGAGGGTCTGTATGTATTAGCACTAGTCTGAGGAGGCAGCAATTTGGCTTTCA

AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGCTTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTACAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTACTATACGGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGGTCCCGACGCATGGTATGTATTTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGTTCGGTCCCTCAGGCGAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG

>P12, London\_17, VIM-2, 11.09

TCCCTCGTCCCTAGTATGAACTTCTCTTACTGCTGTCCCAAATGGCCACACCGGCGGTCAAATTCCGCCAA  
ACACCCCCGCTACCAGACTTCACATGGTTCGCCCGTTGCAAGGAGACGGGCTCTCAGAACTCTTAAATGA  
GAACACCGACATCATATGCTTCTGGCACCCATTGTCGTGACTAGCTCTCCCTACTTGCTGAAGTTGGCGTTGA  
ACGGCATAGTAGACGTTTCTTTTCGGCCTGTATCGCATGGCTTACTTGACTCACACGAGTGACTCATACTAA  
GACATTTAACAACTGCATGGCATGCACTTCTGGCCTCGTCTGTCTCTACCGAGACGCTGCAAACCGGTCTC  
TCTCCGGGACTGACTCTGCCCTCATTACCTATTTTCTTGTAGTGCATGGGCGTGTGTGGTGTGTAATGTCTTAG  
ACTGTAGCTGGCTCTACCGACTATCTATTCGTCTGCGCTTACCGCCCCCAGTTTTCGCGCCTCTACCGAGCTT  
ATCTTAGTCTTAACCACAGGCATGCGTCTGTGTAGTTCTCCCATAACTCTCCAACGGGCCTTGAGTGAACAG  
AGTGAATTCTTGGGGGATTGTTTGTGTGCCTTTCGGGAGGGTCTTCTCGTCTATTGGGCGCTTGCCCACC  
GCCCTACTCGGTGCGCGGCTGGAAGCTATATAGTTGTCTTCCGCACCACTGGCGCCCCGCCGATGATC  
AGACGCTGCTCCAAACTCCAGTTCGCGGGAGTCCCTTAAACATCTCAGCGTCTGTCACGCGCCGGAGCCCCG  
GTCAGATGGGTCAAGGGTTTGGTGGTTCGTGGATTGTAGTGCATTACATTGGTATGTTGGCACGCATGGTCCT  
GTAGCCCAATCTCTAAACGCTCGAGATAGGGTTAACCGCAAGCAGTCAGCTTTGTGTGAGTGAAGGAATGT  
GCGCCTACTAGAAGTCAGCATCCGAGCTCCACTGGAGTCCGATCCTCTCGGTTTCTCTCGAAGGGTCTTCTAA  
GTAAGTCGTTAGGGCGGCAGAGGAGCACCTATCGTCGTCGCGTGCAGACTGCCTTTGAGTCGCGCACTGCC  
TCAGTTTTGCCACCTGCGGTCTTTAGAGAGCACAAAATTAGTCGTCCTTATGAGAGACCGACTAGTATGCC  
CTATCCGTTTACGATCCGTGCGGATCTTGTCTCACGGACTCCACCTACTAGTTTCGTTATATGGTTCGGGTTCT  
GGCTGCTCTGGCGTGGGTCTAGGGTCTCTCGCGTCGACAACGCTTACGTAGAACCAAGAATGGAACGGACA  
CATGCATTACTTGTACAATAACGTCTGCGGTAACAAGGGGAATCCACTTTCCCTATTGCCGATTGGTGCATT  
GGAGAATGACACCCTACACTTCTACCACCTTAGTCATATCCGCTCCTGCCAAAGCGTTTAGCCAAACAAATGT  
GTGTTCTACGCCGGGAGCTAGGCAGATTTTCCCGTCCGGTACGGCGCATTCTTGACCTCAATATCAACCTGCTC  
GTATGGACATTTCTAGCAGTTGTTAGCCCATATCTCCAAGGAGTTATCTCGCCACGTCCAGGTCCAATCCGC  
TCGTACGTTTTCTTTACGCAGCCTAGTCGTGCGGGAGATACCCCATCGGGGGTTGATCATAATTGCGTGGG  
CGCGACTGCCCTTACAGTGAAGAAGGCAGGGTCTCGGCGCTACCAACCGCCCCAATTTTCCGCTTGCTA  
CACTATCGCTGTTGCCGACTAGACCAGTGGGTGCGGTGTATGGTTCGAGTCCGACCCCATCATCTCAACTGTT  
TTACCACTTACTCAACTTTTAGTTTTCAGTAAGGCACCGACAGCTTTATAGCCCCGCGCTGCTGTCTGGATCTTT  
AGATCGCTTTATCGGGGCACGCAGACCTTAAACATCCTGTGGGTAGGGTGTGACACATCACCAATAGCCCCA  
CGTTGGTGGCGAGTCGACATCGTCAGTCTATATTACGTACAGGGTCAACGCATAGTCGTTGGATACCCAGCC  
GATCTGGATCTCCATTACATTAACGCGCTATGCTTTTTTCCATTTGCACATGAGCACAGCCATCAGGTTAACCT  
AACTTTGGACCCGCCGGCTAACATGAACGCGTTTCCCTAGACGTTTAGTTTAACTTCCCCTGCTGCGAGCTAG  
GATCTCGCCTCGACGTATTGAACTCCGATGCCATAATTCCGGCCCCCTCCACATATAGGCGTGCCACAGGACTA

TTTGTGGACATTGCGGCTCTGCGTTTCGCTCACCCCTTGTGCTATGCCCATCTTCTCCATGCCCTGCGGTTGCTC  
GTCACCACATTCATCCTCCTCTTTCTTTAAGGAGGGGTTGGGCCCGCTATAGGCGCGCCTAAGGCTCGACCAG  
CCGCTTGTCTCCTGCTCACAAGCATTGCAACCGCGGACGACTGTCTGCCTGTTTTACCCTCCTCCCGCTATCCT  
CGATACGCAATGTAGGTGCAACATTCCGTATTTGTGAAGTTATGCGCCTGCGTCCCCCTTATACATCGCCACGA  
GAGGCCGTTGATTAGTATCCAAGCTCTCTACGGTAATTTTTGTGCCGACTGGTGC GCGTTTGCCTTTGCC  
GGAACCCATGCTGCAAGCCGCCAGGCGGTTCCCGTGAGGCGGGTCCGGTGC GAGTTCCCGTCCGTGACTCACG  
AACATTTTTTCGGCCCCCTCTTNCTCGCTCTAGGCCCTTAATTGCAAGCCCCGATTCTGGGTCCGTTTGTAGTGT  
TATCACGCCTCGCCATGGACTAACTTCGTAACCTCATCCGACCGTTCCGGGGACACCTCATGTTCTGCCATAT  
GATCTCCCGCATATTAACACTCCTCAGCTCGCTAAACTGTGGCACAGTCCGTGAGCTAGTATCCCGGTGACG  
ATCCATATAATAGCGCTTTCTGTCCGATGTTGCTCCACCTGGTGAGGCGGGCGCATCACGGGTCCGAGGAGT  
GGCCTTGTACTAGGGCGCCACACTCCCGACTCTGGGACGTCTCATCAATGCGGACTGACTCCACGCTCCTCCT  
CGCAGTAATCTCTTTCCGGTAGTAATGGAGTGTCCGGTGC GCAATTATTAGCACGTTACTTACGGAGGTACCC  
GTGCTGAGCGCTAGGCACGGTTCGTGGCCATCGCAACCTGCAAATATGCCTTTCAGTAGCCCCCAGCTCCCTG  
AGACGGCGAGACCCGTGAGGCAGGCCACCGCTTACGTTTAGACCACGGCCGAGCGCTCCAAAGAGTTAGCT  
TACCGCAAGTTGTGCTTGGTATTGGGGCGGTCCCTCTACTTCGCGTACGATTGCTAAGATATCCATTACGCG  
CTGTCGTGCACTACAGGATACGGGTCTTTCCAGGTGTGTGGGTACATTATTGAGTGTAAATGCTGACCACCGAC  
CCTACCGCACAGGGGACTATTCAGTGCAATTTCCGACCGGTGGCGTCTATCCCCTTGTCCCTACTTTTGTCTACC  
TCGATATAATAACATAGGGCCGGTAGTCAATTTCCATACCGCAAATCGTCATTTAGCTTTGCTAACTTATAA  
AGGTGCGTGTTCCGGGAGGATTAGATACACGTTCCCTCTTGAGCCCCTATCCTTTCCGCATACCAAACAGATTAGT  
CACCTTCGTATCGACAGAGACCGACGCCAAATCCAACATCAAGTACTATTCTCCTGGTTCGCATCCTGTTTC  
GGTTCCTCTTGTAACAACCAGATACGCTATTTGTGCGGCAACGCCATCCTATAACGCACGTAATCGGGATGGGT  
CCTTGCCTTCGTCCCGATAGCGTAAATTTCTTGAGGCCCGAGGCACTGCCTACAGATTACTAATGATGGAGCTT  
ACTCGCTCTTATCCTCGCCAGGCAGTTCAGCTAAATTATCACCTCTTCAGGTTCTTCGTGCCCGGTTTGGTTTG  
GGTCTCCTTCCATATCATNTATCTGGCGTCTACGGTCTCGATGCAAGGCCCACTGCATCCACTATCGCTTTTAC  
GAGAGTAATCATTGTTACTACTATTGGGTTGGCGCGCAGCTTCTACCCTGGCTGCTCTGTTTCCGGGGCTGTC  
CCTAATAGATGTA CTGATCAGAGTGCTTCTGCTGGTGTCCAATCTCATGCACTATGTCGTCAGATGTTAGGT  
TCGGCGTCGTAGTTTTACTCGCAACCAATCACGGGTCTTTAACCTGCGTATCCTCCAAGGCGTTTCCGGTGGGG  
CGCTGCGTTAGATCGAACGCTCCCCACTAAACCCTCGAACACAAGCTAGTCTCTCCATTCTAGGCGCGCGATT  
ACCCTTGAGCTTTCAAGAGCTAATCCCGGGGACTCCAACAGCATGAACTTGTTTTAGATGCGGGGTGCGACAA  
TACCGAAGCCTTGAGCTAAACTGGCAATAAGATTAACGATCTTCCATCACGATTGGTCACTCGCATCGTTCGGT  
CTAAACTATGCTGGTTTTTACTCCCTAATGATCGGTCCCGTCCGGTATACATTTCTCCGCCTTGGCGTGCC  
CCCTCTCGTTGCGTTTATTCTTGGGTTCTGCGTCTCTGTCGCCCTTCTCGCGACAACACACTCCGGCGCTCA  
TTGCGGCGTGGCCCTATGGGTTCCGACGCGCTACTTAAAAGTAGGTCAATGTCTGATTTGTACCCAACGCC  
TAGCCTGCCCTTTGTAGCCGTCATTTAATCCTGAGGGCTGAGCAGCTGTGCGCCAGAGTTTGTACTGGTGAA  
GTCGTTGATCATCACTTTGAGAATAGCATTGCTCAATCACCAAATCCGCGATTACTATTGAGTGTATCCTTAA  
TCGTACGCGGATGGTCTGTAAAATATCGGGACCACCCGCCGATCTTATCGATACCCGCACTGACATCAGT  
GCTTCCCCTGTACGCCGAGTTTCTGCACAAAGCTTGAGATCGCCGTCGGATTTGCTCCCTACGGTAACGCGGC  
AATACGAGCGACCAAATTAAGCCCTGACCAGAGTGGCTCCTCCGTAGTCTCACGACGATAACCATATTATTAG  
CCTGGGCGCCTCGAGAGATAGCGTGCAGTCCACGCCAGCTCTTTGTAAAGCTCAATGAAAGGCATTCTGTGA  
TTCTAACCCAGGTGACGGGACGACTGTACAGAGTGTGGCCCCGGCCTTACTAGCCTGCATAGCTAGTATCT  
GGGGTGAGCAGCGCCTCGTCCCGTTTTTCTGTTTCACTGTGCCCACTGACGTTTTACGACGTTTGTGTA  
CTCGTGGATGCCTATCGCTTTTTTCTTATAAGTAAACATAGGATTGTCAATGGAGGGGGTGC GAGCGCTCGG  
CCGACCAGGGCCCACCCTCGCGGACCGGCTTTGTGCTGCGGCCTTCCCCCAATATCTTCTCCATTGACCCTT  
GATTAAAAACCCTCAGTGGTAGTGGTCCGCATTCCCGGCCCTCACTCATGTACGCGCTCTTGTCTCAGCGATG  
CTATTCTACGTTGCTCCCGGGTGAGCGGTGGCCACGCGATTTACCAAAGTTTTGTACAGATCCGTTATGTCGAA

ATCCCCATTAATACACGTAACACTACTAGCTTACTGAGTTTCGACCGGCGGCTCACGACGTTACCCCCCGCGT  
CGCCCACTTGAAGGTGGCGCATCCTCTACAGAGGCTCTTGTCTGGGGTCCCTCCCTTACTATGAGTAAATGT  
ACCATTAATCAGTGACGCCATTGGAGGTACGGATTTGCCGGCACGGATCTTAGCTGTGCCCTTCTTTCCACA  
TCCCCAGATTACCCAAATTCGCGCGCAGCTTCCCTAGTACCCGGCGGACAGAGAATGTCGGTTTCCTTACTCCC  
CTAGTGGGCGTATCGCGACCACTCAATCGGTATCCTCGGAGCCACGTATGACCGGGTCAAGATAAATTTAGAT  
TTAACGTAAGAAGGATGCCAGACATAAACTAACTGTCATCGTAAACGTGCTGACAAAATTACCATTGCCCTTAT  
TGTGACGGGGAGATCCAAATATGCGGGTACCTTACGCCGCTTCTGTTCTGCCAGACTAGGTTAGGAACC  
TATCCAGTACCTCTCCGTAACCTCGCTGGTGTGCGCTTCCCTGCCAACTATTGTAATGGCGAGCACATTAACC  
GCTGGGTAAGGCGCAACTTGCGAAGTGTGTTGCGGGCGCTCGACACCGGCCGGGGACTTTATACGCGCC  
CCGCCTGGNCCGTCCCCGAGAGCGGATAGCTCCTCATAACCCTGCAGCCACGCGGCGGTCACTACGCCTC  
CCCTTTCAGACCCTCTCGTAAATGCTGGGGAGTCTCCTTACCCCGAGGGTCCCGACGTACCTTACCCACT  
TAAGGCCATAGCTGTGCGCCTTAAATCCGGGTATTTGCCCCCCCCGAAGTCTCGTTCGGGGATTCCCCGCA  
CCGCCACGTGTGGGATCCACCGAAACGTAGGCGTGTCTGCGCGCCTTGCCACCTGGACTTGAGTCACGACC  
TCGATCGGTCAAGCGAGGGGTACCCCTGCACATTTTCTCTGACCCACACAGGGGAAGTCTCCTCCGTACGG  
GAGAAGAATAATTTTCATGTTTCGCCGTACCCTACGTCGATCAGGCTCGCCGGCTCTGCCAGCACACGTTGGC  
TAACCGCTCGAATTAAGCCCCTCCCTCCTTATCCCCTCCAGTCTCGAATCTCCCGGTATCATGTCCTCTCGAC  
CCCCGGCTTCTAGACGATAGGTTATTCTAAGAATCAGCGGTGGCCCTCCATCACGGCCACCCATCGAGTGCA  
GCCGGAGCGTGTTCCTGTATCATGCATGCTCCCCGCTCTCGCGGTGGCACGCGGAACCAATTTGTCCGGAC  
AAACTCAAAAGTCGTGTGCGGGTACGACGCCCCCTCAGTAAGACTCTCGCGCTGTAGACGGGTAACAATTT  
GACCCATCGCTGGGACCACTTATTACTACAGTGATCCAAAACCGGTTTTCTGATGACTCGTTTGACTGTAGGC  
CTCCTTCTACCTGCGCTCCGACTCTTGGAGGAGTCTCCTATGCTACATCGTTGGTAGATAAACGAGTCAAGTCC  
GAGCGAGCCAGCATCCTAAATGCTGCAGTTATCCGCGCCATGTTCTGGGCCATCCAGCTGGGATTAGTCGTG  
CCCGTGAGGCTTCTTCCCGCCAGTGTGGCCAGGGTGTGTTTCTGACCTCCATCCAGATCATTAGCCGAT  
ACATTGAGTGGGACTCTCAACGCGCCAGGGGACCTTCTCCTATTTGGTGATACAGTCCGCAGTCTACTCCAGG  
GTATTTGGACCATCAAGTCGCCGTACAAAAGAAATACCATAAACACCCCCAAGCGCCTGTGTGTAGTGGGCG  
CTCTGTTTTAGTAGCTTCATATCGTCGTTACAGCGGGCACTACTAATGGTACCAGTCCCCGCATCTAGCTGGGTA  
GTGTAATCGCCATAACCCCTGTGCGACATGAGCACCCATGCCAAAGAGTGCTAAAGCTTTCTAATTCTTTTTC  
GCTGGAAGACCATAACGATTCATCGGCGGTGGCTGGCATGCCCCAGCGGCGTGTATTGTTACTCCTGAGC  
AGCTGTAGAAGGTGTCGGTGTGATGAAGAACCCGTCCCGTGGATTGGGCGGCGCTAGTGGCTTACTATTGCC  
GTTGGTCACGACGACGGCAGGTCCTGGCCCCGGCCATCGCTGGAGCGGCCGCTGATGGTCCATCCGCGTGC  
TCATGCCTTTCATATTAGTCGAGTCAGGCTCTACTGGCAGCGATTTCTTTTACTACAACAATCCGTTCCGCTCTG  
CTCCTCCTAGTCTGCGTCTGTGGATCCTTATGCACAGTATAAACGGCTGACTCAAGGTAGCATATCGAATATCC  
CTGCCTTAGACAATTCGTAGCATCATGACTTCTACCCTCATTAAGTTCGGAACATCCAATGATGCTTTCAGG  
TCACTACGCGCTCCGCGAGCAGTCAAGCGACCTAATTTACTGCCTATCGCTCGATGACACTCGCAGTGGACGT  
GCCCTTGCACGCGCCAGCGTACAAATCAACCGGCGCTTATTCCGTGCTACCTTACTCACAACATCACCATGAGG  
ATCTGTTATTCGGGCCGGTCTGTTAGGCTGTTGGGAGTGCCTGATATCTGTTAGCAATACATGGGGAGAATC  
TTTGGTACTTTACGTATTCCTGCTGTTAGAAATTTTACAGCGGTTTCATAGGATTGACCGCTATTAAGCTTCTTC  
ATACCACCTCCTACCCTCATATTGATCTCCCCAGATGATTTCCCGCTGATTGTAGCTCCGGAACAGGTCAAGCT  
GTGGGGTAGTTGGCTAAGAATTGGATGGAGGTTCCGGCTGGTGTCTTTCGCCGAGCTAAAGAAACCGGGAG  
CGGCAAAATATTGCTTTGTATGTGACTGCGGGTGTGTCGCCCATGGGGCGGCTAGTCGACTCCTAGAATAAC  
ACGGCCGACGTTTTGGTGAACCGTTAAGGCGGGTCTGTGGAGGAAGACCTCCATTACAACAACGGTCCCG  
GAAACCTTGTGGTAGTCGGGAGAAGCATGCGGGTGGACCGCCTACCAAGCGTTGGCACGTACCTCACCC  
CGGTGCGCGTCTACGGCGATCGTCTACTGCCAGGTGCCGGTACCGGCGGGGACACTCTGCCGAGTTGCTAAA  
CTGCCCTCCGGTCAAGGGTTTTGGTGCTACACTCTGTGTACCAGGGGGTATTTACCATTGTCCAATCACAT  
TCCGCTGGCCCCCATCTATCGGCAGTTGGTCCCAGGGGGCCTCCCATGATTACGTGTACGTGCCCCCTCGCCC

ATGTGCGATTTGGCTCCACCCGCTGTGGGCCATCTTCTATATCCAGCCTAGACCCGAACACCTACAAAGAAGG  
AACCACCGCAAGTTGCGTGACGGTCGGTGCTCCCTCAGTACCCTTCTAGTCACTGAGTACGATATTTGGATA  
GTTTCATAGGCATGTATAACCTACGCACCCGAGTTAGCAACTCCTCAACCTTCTCCCGCTTTTTGGGCTCTAGAT  
TTGGGGGCTCCCGTTCTGCGCGGTATAGGCCAGGAAGTTTGCAGCATAACGATAATCTTTTCAAGGCTTTTTA  
CTTGACTCCCTATTGTGTCAGTGCAGGGCCCTTCTTATGGCTCCGGTCTGAGCGCGCTGTCTACATCCATGGC  
GGTCCCTATACCTTAGTCCGATCCTGTTTCGTGGCCTATACAGAAAGCTGGGGGCACCAGGGATTGCACGGCA  
GCGCGAGGTGATGTCCATGGGCATGGAGATTATCCCTATCAGTGGGACATGAGATCGAAGAGCGATAGAACT  
GAGCGCGAATTACAATACGTCTCTCACGTGTACTAACCTATAAGTCAGGCTTTGTCAGTGGTGAACGCTTCGG  
GTGCCGCGAGGAGTGTAGCGAGATCGCATCAGGCCTGTCCCTACGTTGCGCTGGCCGCCGGCGGTTTTTGGC  
CAATTCTACGGGACGCACCGGCGTTGTGACCGTTTGACCCCATGATGGGGAAAGCACGGCCTAGCCTGACGG  
ATCCAGTCGTCTAACCGATTTTTAGTTCGCAAGTGGAAAGTGCCCCGTGAGCACTTCTCTCTGAGTAGAGCC  
CATCAGTCCGATCACGTGCCGATCTGAATCTGGCTAGACGCGCCCATACGTTCCCGATATTGAGCGCTTAAAT  
CTATCCACCTTTGCCGTGCATGCTGTCCATATGCCACCAAACGCATCCAGGGTTCTGCGCTGCGAAGAGTTG  
ATTTATGTCTGCCGTTCTATTCTTATCCAATTTGCGTTTCAGCGTGCTGGCTAGTAAAGTGGCCTGCGAACGTC  
AGATGGGCCGCCACTGCAACTAATGTCTAATCCTGACGTTGGGCTTCTCAGAGCCAATGCACAGTGAGC  
CGTGTGTAGAGGGGAAGCCCGGGGAGGGACGCGTGTCCACGTGCTCCATTTGGCATTGGTGGTACGAAAC  
CGCACTCGGCAAGCGCAGCTCTTTGTTACGGCTGGGAAGTTGCAAGAGACAGTTCAGCACATGACATTCC  
GCCACAAGCTCTGCCACTCGCGTGGTAAAGTAGGGGGACAGCCGAGAAAGACCAGGTGCGAGTAGGTCCCG  
GTTGCAATATGTTAACTTTGGAGCATGCTTATTGCACTCGGGTTGGGGATCTTTCCTATACTCAATCTGAATC  
TTCTTAAGCGAGGATTACAGCGCTAGTGTATAATCACCTCCACGTTCTGCCTCGCTCCGTAATATGA  
ACAGCCGGCGTGCGCCGTAAAGCTACACAAAAATCTATAGGGTATTCGCCGAGCAAGTAACGACAGAACGAA  
TACCGGCGAGGCTAGTCGTCTGTCTACTATCCTGTACTCAACTCAGCCGAAGACGACGGACAGGGTCCCGGGC  
GGGAGATGGCGTGCAATCCTCGTACCGAGAAGTCGGAAGAATCACCGTATGGGGTCAGAACGCCGATAGTG  
GCGCCCACTGAAGCCCAAGGTGCTTTGATAATCCCGGACGCGGGTATCAACAGCCGACGGGTCTTTTGAG  
TCCGCCCCGACACCGTGGCGAGGATCCGAATTTGTCTCTCTGGTCTAAAAGGGTGGCAACCGACGGACTG  
ACGCCGGGGGGGATATTACCATTGTGGACCGGACATAGCCATTCAATGGGCTCTCTCGTTCAGGGTCCGTAC  
AGTTGGCGATCTCATCTGTCGGAGGGGTTGAGGATTACTGAGCGCGGAGCCAGCGCCCCGACGACGGATCG  
GTGTCAGATCGACGTTTATCGTGTGGAAAAGAGTAGGGTGCTAAGGGGGTCCACCGGACAACGAGGGCGA  
CTGTGTCGAGTAGATCAGGCAGATGTTGTAGTGCTAGGTCCCACGCCCAAGGCTCTCGGCGCAGTGCTACA  
TGTCACCATAGGCAACCCGCTTGTGTGGACGTATAAGCAGAAAGGGCGACGGGGACAGCAGATCGAACTCA  
GACTCGGACGCAAGCACAAGGTGTAGGGATTACATCTCGCTCGGGGGGCAAGTCGGATGAGGTTGCCCGAG  
ACCAACGCCCGACAGTAATTTCCATAGGCAAACCTCCTCTTGAATCTGTACCGCTATTCTGGATAGGAAGGA  
AGTACGAACTAGACGGCCCCGTGTCAAAAAGACAGCGACAGACAGGAGCTGGATGATCAGTAGCTACCGGGT  
ACGCCTCTCAGACTATGGGGGGTAGGGGGCCTATTAGATGAGGCCCTCACGTCTCCCTAGTCTACGCCGACT  
GAAAGCGGGTGTGCAACGTATAGGCCGCTAGAGGATCTACGGCGTCGTCTATANACTACCCCAACATAGCAT  
GGTAAGCACTCAAATCCATTGCCATTGCAACGGCGGCTAAGTAGGGGGTAGGCCTTCGTACGGTGTATGT  
GTAAGGGCGCTTATCTGGGCGACTAGGAATGCCAGAACCCCTAGTACGTGGGCGCAGCCTCCAGCGTTG  
CTATTTGTTAGCCGCATAGGAGGGGTCCGAGTCGGGGCCGTATTACCAACGACGACAGACCAAAAGAGGGCT  
CGGGTAGAGCGCTGAACTTTGGGTCAGAAGATCGTCGTAACCCCTGTCAGCGCCATACCCCAAAGAGTTCAA  
TGACCCATGTAGACAAGTGCGAAGACTCTGAAAACGGCGTGTGTACGATTACAAAGAGCCCTACCCACA  
TCGGGCGGAAGCAGACTTGAACCAACTTCACTGGGAACCAGAAAGCACGCGTGCCTCGCCCTGACTATCGA  
CCCGCGTGCTACCAAGCAAGCATCCCGACAAATCATGTCCAGTATACCCCTCTTTGTTCTCTCTGGGTTGTGC  
GCTTGGTGTAGGACGATGTCAGTTAATTGAAATCGATATCTCGAACCAGGCGACCGGGCAATACAGGGG  
ACAAACACACGGACTCCACGCCGCTTTTTGACACTGAATCGCGACCTACTTGCCCGATGTCATATAATAAAC  
GAGACCGGGCCCTACAGTTGTGCGTGAATGGACTTATACTCGACCACGCTGCGAGTACTACCGCTACGTGGCC

CATTTCCCACTGGCACAGGCAGCGCCTGGGGTAGTGGCACGAACGTTCTACGAAAGAGTCCCCGTCTAAGG  
CCTTCAAGTTGACCGGTCAAAGGTCCGGCGGTTGGCTACTAGAGGACCATGCAAGGCGATCGGAGTCCCCTT  
CAGACGGCTCTTCGAGACTATCCCAAAGCCTCTCTGGGGATAGCAGGAGCTTAACTGTCCCGATTCAAAGAA  
CCCGCTATCGGGGACTAGAGAGAAAATATATGCCTACGGTTACATGCCTGGCTACGAATGCAGTGCAGAAAAA  
AAGTAGCCGGGCCGGACGGAACACTTCAAAGGAGGGGACAGTGACCGTACCGTCATCAATAATCCCACCAGC  
TGGAACAGGGCTGGCAAATTACGAACATCAGTGTAAAGGAGCCTAATTAAGGCGAACGCAGGTATCGTTCCT  
ATCGCACATGGCCGACTTACCATTATGTCACAAGGAGGATGTCAGACCCCGAGGTGTAGCGAGCGAGCGGG  
AATCGGATCGAATGAAAAAGCTGTGCATCCGGAACACCGTCTTAAGAATCGCAAATTGAGGGCGCTGACAG  
CCATCCACTGCCGTGGCAAGTGTACGTCATACCTACCAAGCGGTCCCAAGTAGCCTAACGGCGGGGATAATA  
GGTGTAGGAGCGACAAGCCAACTGGGGCTTCGGACATTGATGTGGCTGTTACAGCCTGGCCGTATACTTA  
AGTTCAGATCGTGACCAAGAGCCCGGTACGTCCCCCGATGCCGAACCCAATCCAATAAATATTTAACGCCA  
CGAACCGTTCACAAAATGGACCTGCAGACGATTGAGCTTGAGCGTACCCCAAGGGAAGGAGCCGTAAATAA  
CCAACAGTAGAAAAACGACCTAGTGGCAACCGGGACAATCAATTGACAAGGGGAAAAAGCGAACGTCTCCG  
CCGACCAATTGCCTTCGCGAGTGCCGCACCCGGTCTGCGCATTAGAGCATGTGGACCCGAATGAACGACGA  
GACCCCGTGAATTCGGTAGCGCAGTAGACCTTTCGGTGGCGCCATCTGTCCGACCAGAAGGCGCTTCGATG  
TGCAGAAGAGATCATCCCTGTATTAGTGAAGTAATTGGTCGATTAATACACCGCCGCTTTAAGTCAGCGGACC  
AAAAGATAGGGACCAAAGTAGGTTTGTACAGTTAATAATGACAACGCCAGAGCTGGATACGAAGTAACGCCT  
CCCGAAAATAGTGAGGTACGCGGGGAGATGTCTCAAGTCCGGGGGGCGTCTTAGGAATCGCGGGTGATGC  
CCTGTGAAGGGAGATGAGGAAGGAACAGCGAGCAGGCTATCAGTTGAAGTTATAGGTCAGGCTCGGGCCGT  
AGGGAGAATACTGCAGATCTGAGGAAAACCCACGCGCTAATACCGGTGAGGAGCGCTGTAGAGGAAGACTA  
ATTCCTGAGACGCCAAGGCGACGCGGCATGTAGGTACCAATCGGCCCTATCCTACCGATGAGGAGTGCAGCG  
GAGAGGGACTTCTGCTCCGGTCCAGAGCAATGAATCCGAGGCGAGTGGGGTAAAAACACGGAGAGGGTGG  
GACGGGTGGCGTTCCTGGGTAACAAGGAAGGGAGCGGCTCGAGCGGTCCANGAATCAGGTTGATGTCAAAG  
TACCCGTAGACCAACCGAGGTCGGTGTGGACATAGATTAACACAGTGCCGCCAGGGGTCCGTAGGTGCGTG  
ACCTACAGCGAGAAGATCGGAGGAATTTCCCGCAAGTGAATTAGGAGCGGTTTCTCCGGACACGAAACCG  
CGAAGAGGGGTAGCGGACCAAGAGAGTGTGGATGCTCAAGAGACTCCGACTGACAGCGCACTAGCAAGT  
ATGACCGATAGGGGTACACCTTAGGGGCACGCAGAAGTTGGCGAGGACCTTGTGTGTTACGGTGGTGGCCA  
GCTGAGGTTGCGGATGTAACCCGACTATACTAAGAACCGCTCTGGACTGACCAAGAAGGCGACGCAAAAAGAA  
ACCAGACCCCACTGACTGGTGCCGTGTTTTGGGGTCCATTAATGAAATACGGACGAATCCGATGCCGTTCTG  
TACAGCAGGGGGGCACCATCTTCCCTAGCTTGCCTGGCCATAGGAGAGGCTATGGCGTCCAATTAGGTCTTAC  
ACCCTGCCCCAACCGCATCCGGGGAGGCCGCTGCAAGCGCGTTCGTTACGCCAGTGAATACCTGCAGACGGA  
TTGCGCACGCTTTGTATCATGCCGTGACCAACAAGTGGAGCAAAACGGTAGGGCAGGAACAAAGTTAGCTA  
TCCATGATATTGGTGGTTGTAGTGTCTGGAAGGGGTGACGAGAATATGGGGGTAGGCAACATCGGATGGG  
AGGATACGGGGGCCCTTGAATCGAAAGAAGGGAGTGGGGAGTATAGTAAGAAACCTATGTCATGGACGG  
GGTAGACCAAGCAAGCTCCCTAGGAAGCGAGCCAAGTACAAACAGCCCTAAGGGCCAAGCTGCCGGATTGCC  
GCTGCTAGGCGGAAGTGCGGCGGAAGGTGTCTTAACGTTGCAAGGGACCTGAGCGAGGGCCAATACCCAG  
CTAGAGGTGCAAAGCGCGTACGGTTCAGTGAATCAATACCCCTAAGACCAATTTTAAAGCCATTATTTGGT  
AGTCGCGACAGAGGAACTGTCTGGACCGACAGTGTGGCGAAAGGCAACAACAGGAAAAGCTGGCGAAAAG  
GCGGTGACAAATTTGCGGCCCGAGACCGAGGCTGTGTGTAACGAAAAGTATCAGCAGGCAAGAAATGAAGG  
CGCAGAATAGTGTACAGGCCAGAAAGCGAGTTACACCGGGAGGGAATGGAGCCAGAACATGGCTATTAT  
GAGGGATCCGCTCTCATTGGGACCCTCCTCATGTAATATTAGTGTGTGTGGCGAGACGGCCTTCTTCGGCAT  
CAGAATATTTGTTGTCGGACGTTAATCAGCCTCGTAAGGCACGCGCTATCTAGGGGCTGGTAAGAACTTT  
AGGGGGAGCTGAGTAACGGGGCCGACGTGAATGCAGCATCGGAGTCTGATGGGACAATTCATGCGCGCTCG  
TGCTGCGCAATTGCGGCTAGGAGAACCCTCGTGGACAAACGAGGGTACAACGCCCGCTATGAGAGCCTACG  
GGGAATCCTCGCCTGCGTGTGTGGGCGGGTGGTCTATCCCGAACCGCCACGTAGCAGAGCAAGAAGTTG

CTTGTAACGACTTGACCGATGAGGAGAGTTCAATTGACCAGTATGATGCCACAGCGTACAGCGAGAGCAGC  
GTAATAGAAGGGCGAGAGAAAGCGCAGACGGTACGTCTGGCGCGACAGAAGTAGTTAGCTAAGCTGTGGT  
GCATGAATGCTGCCTTAGCAAAAATCTTCTAAGATTGTGCGCAGCATTTAGATTTGCTGCCAAGAGTATGAG  
GGTGGGACGGCAAGGGTTAGGGTCGTTAAAGTGTCAACGCCGAACCTGACGAATAAAACGGCAGCCTGCA  
AGCATTATGAGATGGACAGCTCCCGCGCTGCGACCTCTGCGGCCAGGCATTACCCGGTGAGGACTTTAATA  
GGCGGAGGTCTGCCACTCACTTAACGCAGGATACGATTGGAGGGCGGAAATCTCCCGTTATAAAATCCAGG  
CTGAAAGAGTGATCAGAGCGCGAACAACGACTCAGGATTCCGGCAACCGTAATCCCAGCAGCGGCGTCAGT  
TGGGGAACAGCGTCGCTACCCTGTATTCTGCCCCATACGCTTGTGGGGATCGGCCGAACCTGACTATCATGCGA  
GGGGGAGGCAATCGTCTCCTCCATGCCCTTATAGGAGAAAGATTCTGCACCAGGGCTTGCGCCTAGCATTG  
ATTTTCTTTGCTTAGGCACTTCGTAGTGGGTAAGTATCGAAACGAACGAAACTGAACGTGGACAAGAGAGATA  
TGCGGACGAGACGAGAAGCGCTTCGCGTTGCAAATTCGGCGAAAGGCGGTTCATGATAGTATATGGGGCGGG  
GTGAGGGAAAATGTAGCAGGCTTCTGCGGCTAGTTGCCCTTAGGCCGTGACTGTGATGAAATTGACGAAGC  
TCATTGGGACAAATATGAGGGGAGGGCACCTGTCAGGTTGTTGAACTGGTACCATAGACACGCAGACAAA  
GACACCCCATTTGTCGCTACAGAGGTGTCCTCATTGTATGGTGCATACGCAGTGACTCTTCAGGTTCCAATGGCT  
GCACATGTATAATTCGAAAGAAGCTAGTTCCAGGGAAACCGCAAGAAAACAGCTACCCCGCTCCAAGTGCG  
ACCACGTTTGGTGCTGAGGTATCAAATGCTTCCACGGACGATTCAGAAGTTTGGGAGGAGCTTTGGCATTTC  
AAGCTATCTTATGCCATACGAAGGATCTGGCCTGCATACGGATGGTGTCTAACAGCAATGTCCTAAGGCCAGT  
GGCATTAAAAAATATCTCGACCGGTGGGCGGAGAAAGAGTGAGAAATGGAATACATTCGCGGGGGGTAG  
AGCAGCGAGTAAAGGTGTCATAGTTTAGGCAGACGCAAGGACCACGGGGCATGGAAGATTGTCACCATAA  
GCAGGGAACCTTGTTGTTAGGTAGCGAGGGCCAAAGGAGGGACCCGGAGTTATCATCTACCCCGCAGGG  
GGGAAAGTTTCCAGAATCAAGGTATGAGGATAAACACACCAGAGCATCTCAGAAGACGGTGGAGACTGCTTA  
ATCTGATGTGCGAACAGACCCGTGACCGTGCCGAGGGTTGCACGAAGGAAGACTGGGAGAAGTACGCTAT  
CAGGAACTATGTCAGTATACAGGGGCGTGGGCCTAAGAACGAGCCAGGATGGGACTCAACGCAAGCATCA  
AGGACCTGGCACCCAATAACTATGTCTTCTATGGAGTGAGCCCATGAGTAGCTCCGTCATAACCTTCGCAA  
GGGAGGAATTAGAAGGAATCAGGTAATATGCCTTGATGTATGGGACCTAAACTCAGTTAGCAGGAGGGGCG  
GAAGAGTCCATACCCTAGTGACCAGCAGATGACGTGTGGGTAGCCCCTGCGCGTGAAGAGGTCATAGCTATT  
TAGAATCCCTAGCCACAGATCTCGTCTTGCCGACTCATCTGGCACCTTAGCCCCAATGGCGGTGTGGCGAGT  
CCAGTAGTCTCCACCAGTCTAAAGGAGGAACGGGCAATGGCCGAGGCACGTTGGGAGTAAGAATGTCACAC  
GGAGCCGCGGAGTGCTTTTGAAGGTCAGAACAAAAGGATATGTATGCCACTCCCCGGATGAGAGCCTCTGGC  
GACGCCCCGAGGAACTATGTACGATAACAGCACCCGAACGCCTGATTGGTAACGGAGCCTGTATTCTAGA  
TGTAAGGTCTGGAAGCTAGGGAAGGGAAGATTGCACGTAGATGTAGGTACCACCCGCTGGTCCACAGGA  
GACGTTGACCCCCGAGCGGTGCTAGTTGTGACGGGGAGGCGACGCTTAGATGTAGTAGGCAGCCCTCCCAT  
TTGTGAGAACGCTGGGACCCATGTTAAGGGAAGTCCAACAAGTTCCGCGCTTTGCAACTGGGCATAGGAGC  
ATATGCCCAAGTTAAGGTCTCTGCCGACATGAGACCGGGGAACTGAGATACAAGGATCGTATGGACCCTCAA  
GCCCAGTCTAATCGAAGGAATTAAGATTCTATCACACAGTGCGTGCTTAACCGGTGACGGAAGTTAAAGTCT  
CTGCACTGGATGGCGGTGCGCTAAGCTGGAATAGGCGACGTACACTGTACGGGGAGATAAAGTAGGGCCGT  
CTAGCCCTTACTCATGGCCCAACAGTTCCTCCCGTACGAGGCTAATCGCACCCCTGCGCACCGAAGGAAATTT  
CCTCGGGCGGTTACCTAAGGCTGACACTCGCGTAACAAGATATTGCCAGCGGATCGCTGAGGAGTAGGGAAT  
AAGTTTGGCGCATTCTGGCGCAAAAATCTGGCGCCGCGGTAGAGGCAAAGCACCTTTGTGTTAATGTGACGA  
GGTGAAGCGCAACGTGTTGATTGGGTTGCGATCAAAAAGGTGATGGTACCTGGTTAAACTACAGGTCCCTA  
ATGCTTCTGCTCGCGCATTGTTGAGGGTTGTATGGTAAAAACCCAGGCAAAGAGAAACAACGTAACGATCT  
GGTTGGAGCTCTTGCTATACTGACAAATGACTCACCTTGAAGTACGCGCGGAGGGATCCGCCCGCCTAAGA  
AAAGCGATACCTCGAGTGTAGGTGGTGCATCCACCAGATTCTAAGTGTGGAGGATACACAGGTCCGAAGG  
ACGAACAGCTGACAGTGCAAGCACTATTGGCCCCCAATGACCAATCTAGCTGGACTATAACCATTGATCGCAA  
ATACAAGCAATGTTTCAGTTTCCGATAAAGCCCCAACGATGATGGCTTGCAGGGGAAAGGTCCGAGGCGGTC

CAAACGTCTCCCCTTCGTGGTAAACTGTACCCAGGATCCTTCTCCCCCTCGTAATGAGGAGTGTGGGTGGAGA  
CAGTAGGCAATCAACGCGCTTCAGATAACGGTCTGCGTTGGAGTACTATAGACTAGGGCCCAATTTTTCGCAA  
GAAAGACTAAAGGTTCGAGCAGGCGCTGGGAAGTGGATTGCGCCGTGTGGAGATAAGAGCCGACACTGGGT  
TAGCGGGTGTATCGAGAGAGTGAATGGGGCTGGCCATTTAAGAACTGATTACAGCTATTTTTCATGGAGCCGC  
TCAATAGCGGGCTTTCCTTAACGGGTGAGCTGGATTATGGCTACACCGGAGACTCCAGGCCGCATATTCTGAA  
GCCTATACGGATAGATCCTCAGCTGGTAGAGCGGAGACCGACTACATCATAAATCCAAGGCAATCTACTTCTA  
TTCAGGGTGGGAATCGCTGCTAGGCACCGGCGGGCCAGAAGGGAAGGGACGGTTATGATACCTTACCCGGT  
CAAAGCGACAGACCCTCAGACAACGTCTAACACGACCCAGTGGAGTGGTACCCAGATACTGAATTGCCA  
GGTCGAACATCGAGAGGAGGACGGCATAAGATGGAAAGGAGCTGAACGCGAACAGGGACGGCTCGGACCG  
CAGGACATGCTGTGTGAGGAACGCATAGTCGTAGAACCCCTGTCTGTTTTGCGGTAAGTGGTCTAAGCAC  
ACCGTCTGGGGTGCGCCAGAACCGTGAGTAGAGTGCCAGCAGAGTAGCTGCACATCTCCCTCCGGCATCGAG  
AAGGGCGGTTGGCGGCGTGACTACTATAACTGAGAAGTGGTCACTCTAGCTGAAGATAACCAGCAAGGAACC  
CCTCTCTCGAATTGGATTAGGGCGCCCCAAGCGGGACACTACGTTGATGCTCCAACTGATGGAGCCGGGAT  
AGAAAAAAGGCAATCCAGCGATCGGTATGCAGGGGTGGGACGGAAACGAAAAATCTACTCCGACGGGGG  
GATCCCCTCAAATCCGCACGCAGTTACCCCCGCGCGCCGCACTTTGTTATTACGATCTTTCTGCCTGGATG  
CGAGACCGATAGTTGTCTGCGTTAGCTACTCAGAGGTCAGTTCATCTCCTCCCGCTTGTTAATCCAAGAGGAGT  
GAGAGCAGGCCGACGTTTCATGGTAGGACGAAATGGGAGGAAAAGTATGCCTATAACACCTAACAGCAGACA  
TTGTCGGCTCCGCAGGGCCGGTACGGGAAAGAGGGGGACCAGCAGACGTTTGCCGAGAGACCAGCAGGTC  
GTCGATTGCGGACTCGTTTAGGAGGATGATGACAGGGCAGAGCCCTAATGAGGCGGTGTCGAAAATACTCTC  
ATGTAAGAAGAGGTCCTTGACACGTTTTGAGGGTTACGATTGGCCTGAGATAGGTACAGCGCTTATAAATG  
GGGCGGCCGTGAGACGTGTGATCTACCTAGTGCCTTGTAGGGTACAGAGTACCAAGGTTCCGGATCAGGCAA  
CCAGGTCAAAGACGTCTACGGGCGCCATGGGTAAGCGGTAATCCGTCAGCATCAAAGCCTTACGTGGGTG  
CCCGGTGCCCAAGGTGGGTTGATGTGTCTGGGACTCCTGTGCACGACTTCCCTAGCTATCCGGCTGTGGC  
CATAGCGACCAAGTAGATTGTAGCGAAAACTCGGAAGACGTGGTTTATAGGGTAGCGTCAAAGGCCGCCT  
AAATGTTATACACTAACAAAGAGGGTCTGTATGTATTAGCACTAGTTCTGAGGAGGCAGCAATTTGGCTTCA  
AAGACGATACGTAGAGCTGAGGTGCTTTTTGTTAACCAAGTAACAACAAGAAAGCTACGCTGTATCCGAATAC  
GACCTTACACGGTCGGTGTGTAGCAGGAGGTTGCGAGGTCTTGTGATGAGGCTGCGAACGAAGTAGACGGC  
TCACTATTCGATGGGTGCCGGGGGGCGCGCTCACAAACGGCGTGGCCTTTGGGCTGCTCTGGACTAAGGGCAA  
AGGGAATGGACCCGTACGATTTGTGTGGAGGTGCTCTAAGCAACGACTTAGAGGAGCTCCCGCACTTACT  
GGCCGTAATAACGACGAGACACAATTCTCCCTTCCACCGTATAAGTGAGACCGTAGGGAAATCGCGAGGT  
GATAGTCAGTGCAGGAGGTGTCAGTAGCTCAGGTGCCGGGCAAGTCGCCGTAAAGTTTCTGTGCGACAAAGA  
GCGGGCAGTGCATATCCGTCCCCTAACAAAGGCGAGGAAACAAAGTGAGTGCCCGAACCATGCGATCCTTGGG  
GGTGCAGGAAGATGCAGGGCGTCTGCAACGTCCAGTGGCACTGTTAGTATGCGAGCCACGCAGCTGCAGG  
TGGGGACGAGCGGATTCAGCCCGTTAAATTAAGTGGCGGCTCGGGTCCCGACGCATGGTATGTATTCA  
TCGAGGTGACAAACGGTGAAATGGGTTACGTTCCACACCGTGGGCAGTTCATCGGCTACCTAGCTCGTAACG  
TCGGATGTACACAATAGCGAATGGTGGGTGGTCTTCAGGCCAAGCATCGTGCTACCAGCCGCCGATAAGA  
TACCCGCAAAGAGTGCATAAAG