

# A

10 20 30 40 50 60  
ATGGAGGACGCCAAGAACATCAAGAAAGGGCCCGCCCTTCTACCCCTCGAGGACGGC  
M E D A K N I K K G P A P F Y P L E D G

70 80 90 100 110 120  
ACCGCCGGCGAGCAGCTCCACAAGGCCATGAAGCGCTACGCCCTCGTCCCGGCACCATC  
T A G E Q L H K A M K R Y A L V P G T I

130 140 150 160 170 180  
GCCTTACCCGACGCCACATCGAGGTCAACATCACCTACGCCGAGTACTTCGAGATGTCC  
A F T D A H I E V N I T Y A E Y F E M S

190 200 210 220 230 240  
GTCCGCCTCGCCGAGGCCATGAAGCGCTACGGCCTCAACACCAACCACCGCATCGTCGTC  
V R L A E A M K R Y G L N T N H R I V V

250 260 270 280 290 300  
TGCTCCGAGAACTCCCTCCAGTTCTTCATGCCCGTCTCGGGCCCTTTCATCGGGGTC  
C S E N S L Q F F M P V L G A L F I G V

310 320 330 340 350 360  
GCCGTCGCCCGCCAACGACATCTACAACGAGCGGAGCTCCTCAACTCCATGAACATC  
A V A P A N D I Y N E R E L L N S M N I

370 380 390 400 410 420  
TCCCAGCCACCGTCGTCTTCGTCTCCAAGAAGGGCCTCCAGAAGATCCTCAACGTCCAG  
S Q P T V V F V S K K G L Q K I L N V Q

430 440 450 460 470 480  
AAGAAGTCCCCATCATCCAGAAGATCATCATGACTCCAAGACCGACTACCAGGGC  
K K L P I I Q K I I I M D S K T D Y Q G

490 500 510 520 530 540  
TTCCAGTCCATGTACACCTTCGTACCTCCACCTCCCCCGGCTTCAACGAGTACGAC  
F Q S M Y T F V T S H L P P G F N E Y D

550 560 570 580 590 600  
TTCGTCCCCGAGTCCTTCGACCGGACAAGACCATCGCCCTCATCATGAACTCCTCCGGC  
F V P E S F D R D K T I A L I M N S S G

610 620 630 640 650 660  
TCCACCGGCCTCCCAAGGGCGTCGCCCTCCCCACCGCACCGCTGCGTCCGCTTCTCC  
S T G L P K G V A L P H R T A C V R F S

670 680 690 700 710 720  
CAGCCCGGACCCCATCTTCGGCAACCAGATCATCCCCGACACCGCCATCCTCTCCGTC  
H A R D P I F G N Q I I P D T A I L S V

730 740 750 760 770 780  
GTCCCTTCCACCACGGCTTCGGCATGTTCCACCACCCTCGGCTACCTCATCTGCGGCTTC  
V P F H H G F G M F T T L G Y L I C G F

790 800 810 820 830 840  
CGCGTCGTCCTCATGTACCCTTCGAGGAGGAGCTCTTCCTCCGCTCCCTCCAGGACTAC  
R V V L M Y R F E E E L F L R S L Q D Y

850 860 870 880 890 900  
AAGATCCAGTCCGCCCTCCTCGTCCCCACCCTCTTCTCCTTCTTCGCCAAGTCCACCCTC  
K I Q S A L L V P T L F S F F A K S T L

910 920 930 940 950 960  
ATCGACAAGTACGACCTCTCCAACCTCCACGAGATCGCCTCCGGCGGGCGCCCCCTCTCC  
I D K Y D L S N L H E I A S G G A P L S

970 980 990 1000 1010 1020  
AAGGAGGTGGCGAGGCCGTGCCAAGCGCTTCCACCTCCCCGGCATCCGCCAGGGCTAC  
K E V G E A V A K R F H L P G I R Q G Y

1030 1040 1050 1060 1070 1080  
GGCCTCACCGAGACCACCTCCGCCATCCTCATCACCCCGAGGGCGACGACAAGCCCGGC  
G L T E T T S A I L I T P E G D D K P G

1090 1100 1110 1120 1130 1140  
GCCGTGGCAAGGTGTCCTTCTCGAGGCCAAGGTGTCGACCTCGACACCGGCAAG  
A V G K V V P F F E A K V V D L D T G K

1150 1160 1170 1180 1190 1200  
ACCCTCGGCGTCAACCAGCGCGGCGAGCTCTGCGTCCGCGGCCCATGATCATGTCCGGC  
T L G V N Q R G E L C V R G P M I M S G

1210 1220 1230 1240 1250 1260  
TACGTCAACAACCCGAGGCCACCAACGCCCTCATCGACAAGGACGGCTGGCTCCACTCC  
Y V N N P E A T N A L I D K D G W L H S

1270 1280 1290 1300 1310 1320  
GGCGACATCGCCTACTGGGACGAGGACGAGCACTTCTTCATCGTCCGACCGCTCAAGTCC  
G D I A Y W D E D E H F F I V D R L K S

1330 1340 1350 1360 1370 1380  
CTCATCAAGTACAAGGGCTACCAGGTGCCCCCGCCGAGCTCGAGTCCATCCTCCTCCAG  
L I K Y K G Y Q V A P A E L E S I L L Q

1390 1400 1410 1420 1430 1440  
CACCCCAACATCTTCGACGCCGGCGTCCGCCCTCCCGACGACGACGCCGGCGAGCTC  
H P N I F D A G V A G L P D D D A G E L

1450 1460 1470 1480 1490 1500  
CCCGCCGCGTCGTCGTCCTCGAGCACGGCAAGACCATGACCGAGAAGGAGATCGTCGAC  
P A A V V V L E H G K T M T E K E I V D

1510 1520 1530 1540 1550 1560  
TAGTTCGCTCCCAAGTGACCACCGCAAGAAGCTCCGCGGCGGCGTCGTCCTTCGTCGAC  
Y V A S Q V T T A K K L R G G V V F V D

1570 1580 1590 1600 1610 1620  
GAGGTCCCAAGGGCCTCACCGGCAAGCTCGACGCCGCAAGATCCGCGAGATCCTCATC  
E V P K G L T G K L D A R K I R E I L I

1630 1640 1650  
AAGGCCAAGAAGGGCGGCAAGTCCAAGCTCTGA  
K A K K G G K S K L \*

## B

10 20 30 40 50 60  
ATGACCTCCAAGGTCTACGACCCCGAGCAGCGCAAGCGCATGATCACCGGCCCCAGTGG  
M T S K V Y D P E Q R K R M I T G P Q W

70 80 90 100 110 120  
TGGGCCGCTGCAAGCAGATGAACGTCTCGACTCCTTCATCAACTACTACGACTCCGAG  
W A R C K Q M N V L D S F I N Y Y D S E

130 140 150 160 170 180  
AAGCACGCCGAGAACGCCGTATCTTCTCCACGGCAACGCCGCTCCTCCTACCTCTGG  
K H A E N A V I F L H G N A A S S Y L W

190 200 210 220 230 240  
CGCCACGTCGTCACCCACATCGAGCCCGTCGCCCGCTGCATCATCCCGACCTCATCGGC  
R H V V P H I E P V A R C I I P D L I G

250 260 270 280 290 300  
ATGGGCAAGTCCGGCAAGTCCGGCAACGGCTCCTACCGCCTCCTCGACCACTACAAGTAC  
M G K S G K S G N G S Y R L L D H Y K Y

310 320 330 340 350 360  
CTCACCGCCTGGTTGAGCTCCTCAACCTCCCAAGAAGATCATCTTCGTCGGCCACGAC  
L T A W F E L L N L P K K I I F V G H D

370 380 390 400 410 420  
TGGGGCGCCTGCCTCGCCTTCCACTACTCCTACGAGCACCAGGACAAGATCAAGGCCATC  
W G A C L A F H Y S Y E H Q D K I K A I

430 440 450 460 470 480  
GTCCACGCCGAGTCCGTCGTCGACGTCATCGAGTCCTGGGACGAGTGGCCCGACATCGAG  
V H A E S V V D V I E S W D E W P D I E

490 500 510 520 530 540  
GAGGACATCGCCCTCATCAAGTCCGAGGAGGGCGAGAAGATGGTCCTCGAGAACAACCTC  
E D I A L I K S E E G E K M V L E N N F

550 560 570 580 590 600  
TTCGTCGAGACCATGCTCCCCTCCAAGATCATGCGCAAGCTCGAGCCCGAGGAGTTCGCC  
F V E T M L P S K I M R K L E P E E F A

610 620 630 640 650 660  
GCCTACCTCGAGCCCTTCAAGGAGAAGGGCGAGGTCCGCCGCCACCCTCTCCTGGCCC  
A Y L E P F K E K G E V R R P T L S W P

670 680 690 700 710 720  
CGCGAGATCCCCCTCGTCAAGGGCGGCAAGCCCGACGTCGTCCAGATCGTCCGCAACTAC  
R E I P L V K G G K P D V V Q I V R N Y

730 740 750 760 770 780  
AACGCCTACCTCCGCGCCTCCGACGACCTCCCCAAGATGTTTCATCGAGTCCGACCCCGGC  
N A Y L R A S D D L P K M F I E S D P G

790 800 810 820 830 840  
TTCTTCTCCAACGCCATCGTCGAGGGCGCCAAGAAGTTCCCCAACACCGAGTTCGTCAAG  
F F S N A I V E G A K K F P N T E F V K

850 860 870 880 890 900  
GTCAAGGGCCTCCACTTCTCCAGGAGGACGCCCCCGACGAGATGGGCAAGTACATCAAG  
V K G L H F S Q E D A P D E M G K Y I K

910 920 930 940  
TCCTTCGTGAGCGCGTCCTCAAGAACGAGCAGTAATAGTGA  
S F V E R V L K N E Q \* \* \*