



1 CTCGAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACG  
101 AAACAAAACAAACTAGCAAAATAGGCTGTCCCAAGTCAAGTGCAAGTGCCAGAACATTTCTCTATCGAAGGACCTGCAGGCGTTACATAACTTACGGTA  
201 AATGGCCCCGCTGGTGACCCGCCAACGACCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCATTGACGTC  
301 AATGGGTGGAGTATTTACGGTAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCC  
401 CGCCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGATGATGCGGTTTTGG  
501 CAGTACATCAATGGGCGTGATAGCGGTTTACTCACGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTGTTTACTAGTCAGTGGCC  
601 AGAGCGCACATCGCCACAGTCCCGAGAAAGTTGGGGGAGGGGTGCGCAATTGATCCGGTGCCTAGAGAAGTGGCGCGGGTAAACTGGGAAAGTGAT  
701 GTCGTGACTGGCTCCGCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTTGCCGTGAACGTTTCCCTATCAGTGATAGAGATCTCCC  
801 TATCAGTGATAGAGATCTTCGCAACGGGTTTCCGCCAGAACACAGCTGAAGCTTACCCGGTACCATGGGAATTC AAGCTTGGATCCAGATCTGGTAC  
901 CTCTAGACTCGAGATGCATGATATCGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGC  
1001 TTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAAGTTAAACAACAACAAATTGCATTCATTTTATGTTTCAGG  
1101 TTCAGGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAAACTTAACTCCAAT  
1201 CAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCA  
1301 TGGAGTTTAAGATATAGTGATTTTTCCCAAGGTTTGAAGTACTCTTTCATTTCTTTATGTTTTAAATGCAGTACCTCCACATTCCCTTTTTAGTAAAA  
1401 TATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTA  
1501 GTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCGAATTCCTCGACTCATTCTTTGCCCTCGGACGA  
1601 GTGCTGGGGCGTCGGTTTTCACTATCGGCGAGTACTTCTACACAGCCATCGGTCCAGACGGCCGCTTCTGCGGGCGATTGTGTACGCCGACAGTCC  
334 T S P R R N G S D A L V E V C G D T W V A A S R R A I Q T R G V T G  
1701 CGGCTCCGGATCGGACGATTGCGTCGCATCGACCTGCGCCAAAGTGCATCATCGAAATTGCCGTCAACCAAGCTCTGATAGAGTTGGTCAAGACCAAT  
301 A G S R V I A D C R G Q A W A A D D F N G D V L S Q Y L Q D L G I  
1801 CGGAGCATATACGCCGGAGCCGCGGATCTCGAAAGTCCGGATCGCTCCGCTCGAAGTAGCGCTGCTGCTCATAACAAGCAACCAGGCCCTC  
268 R L M Y A R L R P S G A L E P H R R E F Y R T Q Q E M C A L W P R  
1901 CAGAAGAAGATGTTGGCGACCTCGTATTGGGAATCCCCGAACATCGCCTCGCTCCAGTCAATGACCGCTGTTATGCGGCCATTGTCGTCAGGACATTGT  
234 W F F I N A V E Y Q S D G F M A E S W D I V A T I R G N D T L V N N  
2001 TGGAGCCGAAATCCGCGTGCACGAGTCCGGACTTCCGGGCGAGTCCGCGCCAAAGCATCAGTCTATCGAGAGCTGCGCGACGGACGCACTGACGNT  
201 S G F D A H V L H R V E P C D E A W L M L E D L A Q A V S A S V T  
2101 GTCGTCCATCACAGTTTCCAGTGATACACATGGGGATCAGCAATCGCGCATATGAAATCACGCCATGTAGTGTATTGACCGATTCTTGGGTCGGAAT  
168 D D M V T Q W H Y V H P D A I A C I F D R W T T Y Q G I G Q P G F  
2201 GGGCCGAACCCGCTCGTCTGGCTAAGATCGGCCGAGCGATCGCATCCATGAGCTCCGCGACGGGTTGCAGAACAGCGGGCAGTTCCGTTTTAGGCAGGT  
134 P G F G S T Q S L D A A A I A D M L E A V P Q L V A P L E T E P L D  
2301 CTTGCAACGTGACACCCTGTGCACGGCGGGAGATGCAATAGGTGAGGCTCTCGCTGAATCCCAATGTCAAGCACTTCCGGAATCGGGAGCGCGCCGA  
101 Q L T V G Q A R R S I C Y T L S E S F E G I D L V E P I P L A A S  
2401 TGCAAAGTGCCGATAAACATAACGATCTTTGTAGAAACCATCGGCGCAGCTATTTACCCGAGGACATATCCAGGCCCTCTACATCGAAGCTGAAAGCA  
68 A F H R Y V Y R D K Y F G D A C S N V R L V Y G R G G V D F S F A  
2501 CGAGATTTCTCGCCCTCCGAGAGCTGCATCAGGTGCGAGAGCTGTGCAACTTTTCGATCAGAAACTTCCGCGACAGAGCTCGCGGTGAGTTGAGGCTTTT  
34 R S E E G E S L Q M L D S V S D F K E I L F K A V S T A T L E P K K  
2601 TCATGATGGCCCTCTATAGTGAGTCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAATCCGGTTCCTTGAATTAGCGGTGGTTTTT  
1 M  
2701 ACAACACCTAAAAAGGGTTTAAAGATACCTTTGAACCGCTAAGAAGCCCGAGAATTAGTCCGCTCAAAACTCAAGGGGACAAATCCAAAAATGACT  
2801 TCCAGCGCCAGGCTGGCCTGACTAGTCTCCACCACCAAAATGTGAACAAACTCCAACGCCATTACATCCCCTCCCCCGCCGACTAGCCGTGCTCAA  
2901 AGCCCGAGGTGACTATTGCGGCCGATAGACCAGGGTCCACAGGAAGCAGCAGCCGGTGAAGGACCAGGCCCTTCTCTTTGTGTGGGTGACTACCCG  
3001 CCCGCTCCACCGGCTGCCGCTCTCCATTTGAGCTCTTGAACAGGGCCGGGAGCGCCATCTTCCACGCACGCAACTGGTGCCGACGGGATG

3101 GCCTCACCTAGTTAGGGAGGCAGGGCAACGCGGCGCCGCAAGCCAGATCGTGCCGGGTGCTGGGGCCACATGGCTCGGCACGCTAACCCAGCCTGG  
3201 TTGCTTCGGGAAAAACCCAGGCCTCGCCCCATCCAGGTGGCGTCGGACATGTGCTCCGAAGCGGGCGGGCCCCAGCCGCCACTCCTGTCCCTCCATTC  
3301 CTCCCAACCATGACCTCTCCGGGCTCCGGGCGAGCAAGCCCCGACCCTCCCTTTGTTAGCCCTATTGCTGAACGGCAATCGAAGGCAGCAGGGCAAC  
3401 AACAAACAAAAAAGACCAGAGTGCGGCCGAGTAGCACGCGGCGGGCGGGACACCACGCTAGGCCTCAAGCCGGACACGAGGCGAGGCTACG  
3501 GGGTTGCCGCTAGGCCTCGCACTCTGCCTCCCGCGCCCGCAACTCGAAGCGGGAATGCTCGCAGCTAATCCCCGCGACGACAGCGGGGCCGGCCC  
3601 GCTCGGAGCAGGACCTCCAGCTCGGGCGCCGCGGAAGCCACACCCGCCCTCACCTGCGTTCTGACGGCAAGCTTCGGCGAAGAAGCTGTGCCCTGGG  
3701 GGTCGCTTGTGGTCTCTTATAGCCGCTCGGCGTCAGGCCCGCCCGCAATCAGCGCCGCCCGAGCCCGCTCCTCCGGTGGGCGCGGGACCC  
3801 CGCCCCTGCTGTGGGGAGGGGCGGCCGCTGGAGGCCCTCGCGCTCTGGCGGAAGTAGTCGACGGACTGGGCTACGGGCGCCCCGAGAGGCGCAGC  
3901 CCAGAGGCCGCGCTAGGAAGGGGCGGGCGCGAGAACACGATCCCTCCCCACCCCTCGGACGTGACTCGGACCACATCCCGCGGGTCGCTAGGGCCCT  
4001 CCCTTCTGCTCTTTCCCCAGCCTGGCGCGCTCTGGGGCGCGTACTCAGCCAGAATGTTGGCAATGGGGGAGGGCGGAACGGGGAAGTGGAGGACGC  
4101 GGATGAAAAGTCGGAACGAAGGAAGCTGAGTTTCGCTGCAGGTTAATTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGG  
4201 CCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAG  
4301 ATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTG  
4401 GCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTAGCCCGACCGCT  
4501 GCGCCTTATCCGGTAACTATCGTCTTGAAGTCCAAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTA  
4601 TGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTC  
4701 GGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGAT  
4801 CCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGT