```
   1 ctgcaggcagcaaaaccacggtaatcaaacgcgcgagcaccgcagcagctgcgccagcgg  60
         A  G  S  K  T  T  V  I  K  R  A  S  T  A  A  A  A  P  A  A
  61 ccgttgcggcactgcctgcaggccctgctcccaaaggctggggattggccttctaatggca 120
         V  A  A  L  P  A  G  P  A  P  K  G  W  G  W  P  S  N  G  I
 121 ttttgattggcaaatttcttcaaacggtagtttgaataaaggtattgatatcgccggag  180
         L  I  G  K  F  S  S  N  G  S  L  N  K  G  I  D  I  A  G  D
 181 atttgggacagcctgtttttggctgcgtctgatgggtcagttgtttacgccggcagtggat 240
         L  G  Q  P  V  L  A  A  S  D  G  S  V  V  Y  A  G  S  G  L
 241 tgaggggctacggcgaattagtcatcatcaagcacagcgatacctacgtcagtgcttacg 300
         R  G  Y  G  E  L  V  I  I  K  H  S  D  T  Y  V  S  A  Y  G
 301 gccacaaccgtaggcgttggttcgggaggggcagcaggtcaaggtcggacagacaattg 360
         H  N  R  R  L  L  V  R  E  G  Q  Q  V  K  V  G  Q  T  I  A
 361 ccgaaatggggtcaactggtacagaccgggtgaaacttcactttgagattcgccgtcagg 420
         E  M  G  S  T  G  T  D  R  V  K  L  H  F  E  I  R  R  Q  G
 421 gtaaacctgtagatccactgcaattccttccacgccgttgaTCGCTTACCAGCCTGTTCC 480
         K  P  V  D  P  L  Q  F  L  P  R  R  *
 481 TGATGTAGTTAAGGAACAGGCTCCAGCATTGCCAAGGATATAGGCGAAGCTTGAGCTTGA 540
                          SD              rpoS
 541 GGTCGAACTCACCAAAGGACTACAACAatggctctcagtaaagaagccccggggtttgac 600
                              M  A  L  S  K  E  A  P  G  F  D
 601 atcgacgatgaggtgctccttatggactccggcatccgacgcgacttgatgtcagaagac 660
         I  D  D  E  V  L  L  M  D  S  G  I  D  S  D  L  M  S  E  D
 661 gacgaatcaaccccctactgcccgccaccaagtccaaaaaagcgaccgctacaaaacagac 720
         D  E  S  T  P  T  A  R  T  K  S  K  K  A  T  A  T  K  Q  H
 721 aagtacattgactacacccgggcgctcgatgcgacccagctgtatctcaatgaaattggc 780
         K  Y  I  D  Y  T  R  A  L  D  A  T  Q  L  Y  L  N  E  I  G
 781 ttttctccgttactctccccagcagaagaagttcattttgcgcgcgcttgtcgcaaagtgga 840
         F  S  P  L  L  S  P  A  E  E  V  H  F  A  R  L  S  Q  S  G
 841 gatccggccgggcgcaagccatgattgaaagcaacttcgtctctggtggtgaaaatcgcc 900
         D  P  A  G  R  K  R  M  I  E  S  N  L  R  L  V  V  K  I  A
 901 cgtcgctacgtcaatcgtgggctctcgctactggatctgattgaagagggcaacctggga 960
         R  R  Y  V  N  R  G  L  S  L  L  D  L  I  E  E  G  N  L  G
 961 ctgattcgcgcagtagagaagtttgaccccgagcgcggtttccgtttctcgacttacgca 1020
         L  I  R  A  V  E  K  F  D  P  E  R  G  F  R  F  S  T  Y  A
                                               "rpoD Box"
1021 acctggtggatccgccagacgattgaacgggcgatcatgaatcagacccgcaccattcgt 1080
         T  W  W  I  R  Q  T  I  E  R  A  I  M  N  Q  T  R  T  I  R
1081 ttgccgattcatgtcgtcaaagagctcaatgtctacttgcgggctgcacgcgaacttacg 1140
         L  P  I  H  V  V  K  E  L  N  V  Y  L  R  A  A  R  E  L  T
1141 caaaagctcgatcacgaaccttcccctgaagaaattgccaatctgctcgaaaaacccgtc 1200
         Q  K  L  D  H  E  P  S  P  E  E  I  A  N  L  L  E  K  P  V
1201 gcagaggtcaagcgcatgcttggactgaatgagcgggtgtcctcggtggatgtttcttta 1260
         A  E  V  K  R  M  L  G  L  N  E  R  V  S  S  V  D  V  S  L
1261 ggccctgattccgataaaaccctgctcgataccctgacagatgatcgacctacagatcct 1320
         G  P  D  S  D  K  T  L  L  D  T  L  T  D  D  R  P  T  D  P
                NheI
1321 tgctagctgcttcaggacgatgacctgtcgcaaagtatcgatcagtggttgtctgaactt 1380
         C  *  L  L  Q  D  D  D  L  S  Q  S  I  D  Q  W  L  S  E  L
1381 acagacaagcagcgtgaggtggtgattcgccgcttcgggttgcgtggtcatgaaagcagt 1440
         T  D  K  Q  R  E  V  V  I  R  R  F  G  L  R  G  H  E  S  S
1441 accctcgaagatgttggtctggagattggtctgacacgcgaacgtgttcggcagattcaa 1500
         T  L  E  D  V  G  L  E  I  G  L  T  R  E  R  V  R  Q  I  Q
1501 gtcgagggctcaagcgtttgcgcgagatccttgagcgcaacggtttgtccagtgagtcg 1560
         V  E  G  L  K  R  L  R  E  I  L  E  R  N  G  L  S  S  E  S
1561 ctgtttcagtaaCAGGCATCCTGCTCGCTAAAAAGCCCCGAAATATTCGGGGCTTTTTTG 1620
         L  F  Q  *
                                            ρ-independent terminator
1621 TGCCCGCAGAATCTGGACCGCTGCTGCCAAGGGGTTTTTTGAGTGCGTGCGGGTGACCG 1680
1681 GTCAGTCTCAAAAGTGCAGTCAGGCAGGGGTTGGAACTTTATCTGTCATGGCGTGTAAGC 1740
1741 CTTTGCTTACCTTTCATGTAAGCCAAGGGCGAAAACAGGCTTGCGGATAGTTTGCTTCTG 1800
1801 ACTTTCATAGGTTGTAACTGATTGAATTTAAACATTTTTATTGTTTTGTTAAGTCTGATC 1860
1861 CGGATTTAAAAACCCTAACTGATCGCTTGCAGCCATTCTTAAAGTCTTTAGTATCTCAA 1920
1921 CTGTGCCGACGGATCGACACAGTGCTCAAGGATGAGTGCTCAGGGACAATCGCAGGACGT 1980
1981 GATTCATCAGGATGATGAAAGTGACAAAAGGGAATAGTGCTGAAAAAATGTGGGCGGTCAAA 2040
2041 CCGCCCCTTTTTTTGCCTTGAA 2062
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