



EcoRI (23)

NotI (2)

XbaI (19)

SdaI (38)

1 CGCGCCGCTGCAGCATATCTAGAAATTCGGATCCTGCAGGCCGCCACTCCCCCTCTCTCAGGGTCCCTGTCCCTCCAGTGAATCCAGAAGACTC

SspI (189)

101 TGGAGAGTTCTGAGCAGGGGGCGGCACTCTGGCCTCTGATTGGTCCAAGGAAGGCTGGGGGCGAGGACGGGAGGCGAAAACCTGGAATATTCGGACCT

NheI (296)

201 GGCAGCCTCATCGAGCTCGGTGATTGGCTCAGAAGGAAAAGCGGGTCTCCGTGACGACTTATAAAAGCCAGGGGCAAGCGTCCGGATAACCGCTAG

SgrAI (393)

301 CCTGAGGAGCTGCTGCGACAGTCCACTACCTTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCAGAGCGAACCTGTGCGGCTCGAGCACCGGCGC

401 GTCGAGTTTCCGCGCTCCGGAAGGACCGAGCTCTTCTCGGGATCCAGTGTTCGTTTCCAGCCCCAATCTCAGAGCGGAGCCGACAGAGAGCAGGGAA

NcoI (503)

501 CCCCATGGAAATCAAGGTGCTGTTGCCCTCATCTGATTGTGTGCTGAGGCAAACCCACTGAAATCAATGAAGACTCAATATAGCTGCTGTGGCC  
▶ M E I K V L F A L I C I A V A E A K P T E I N E D L N I A A V A

BglII (618)

601 TCCAACCTTGGCACCACAGATCTTGAGACTGACCTGTTACCAACTGGGAGACCATGAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTG

33▶ S N F A T T D L E T D L F T N W E T M N V I S T D T E Q V N T D A

701 ACAGGGGCAAGCTGCCTGGCAAAAACTCCCCAGATGCTGAGGGAGCTGGAGGCCAATGCCAGAAGGGCTGGTGCACAAGAGGCTGCCTCATTG

66▶ D R G K L P G K L P P D V L R E L E A N A R R A G C T R G C L I C

801 CCTCTCCACATTAAGTGCACCCCTAAGATGAAGAAATTTATCCCTGGCAGGTGCCACACTTATGAAGGTGAAAAGGAGTCTGCTCAGGAGGGATTGGA

99▶ L S H I K C T P K M K K F I P G R C H T Y E G E K E S A Q G G I G

901 GAGGCAATTGTTGATCCAGAGATTCCTGGCTTCAAGGATAAGGAGCCACTGGACAGTATTATTGCTCAAGTGACCTCTGTGCTGATTGCACCACTG

133▶ E A I V D P I E P G K D K E P L D Q F I A Q V D L C A D C T T

1001 GCTGTCTGAAGGGCCTTGCCAATGTCCAGTCTGACCTCTGAAGAAGTGGCTTCCCAAGAGGTGTACCACTTTGCCAGCAAGATTTCAGGGTAGGGT

166▶ G C L K G L A N V Q C S D L L K K W L P Q R C T T F A S K I Q G R V

NheI (1137)

1101 GGACAAAATCAAGGGTCTGGCTGGGGACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGT

199▶ D K I K G L A G D R •

1201 GAAAAAATGCTTTATTGTGAAATTTGTGATGCTATTGCTTTATTGTAACCATTATAAGCTGCAATAACAAGTTAACAAACAATTCATTTCATT

1301 TATGTTTCAGGTTCCAGGGGAGGTGTGGAGGTTTTTAAAGCAAGTAAAACCTCTACAATGTGGTATGGAATTAATTCTAAAATACAGCATAGCAAAA

1401 CTTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGCTGTGCCAATGTGCATTAGCTGTTTGCAG

1501 CCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTCCCAAGTTTGAAGTACTCTTTCATTCTTTATGTTTTAAATGCACTGACCTCCACATT

SspI (1616)

1601 CCCTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATA

1701 ATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGGAACCTTAAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTATCCTCAGTCTCGTCT

125 • D Q E

1801 CTCTGCCACAAAGTGACGCGAGTTGCCGGCCGGTCCGCGAGGGCAACTCCGCCCCACGGCTGCTCGCGATCTCGGTATGCGCGCCCGGAGGGC

121▶ E A V F H V C N G A P D R L A F E R G W P Q E G I E T M A P G S A

1901 TCCCGGAAGTTCGTGGACACGACCTCCGACCACTCGGCTACAGCTCGCCAGGCCGCGCACCCACCCAGGCCAGGGTGTTCGGCCACCACTGGT

87▶ D R F N T S V V E S W E A Y L E D L G R V W V W A L T N D P V V Q D

SgrAI (2044)

2001 CTTGGACCGCGTGTGAACAGGGTACGCTGCTCCGACCAACCGCGAAGTCTCTCCACGAAGTCCCGGAGAACCCGAGCCGCTCGTCCAGAA

54▶ Q V A S I F L T V D D R V V G A F D D E V F D R S F G L R D T W F

2101 CTCGACCGCTCCGGCAGCTCGCGCGCGTGGACCCGGAACGGCACTGGTCAACTTGGCCATGATGGCTCCTCTGTGAGAGAGGAAAGAGAAGG

21▶ E V A G A V D R A T L V P V A S T L K A M

2201 TTAGTACAATTGCTATAGTGTATTATACTATGCAGATATACTATGCAATGATTAATTGTCAAAGTGGGCTGCAGGTTAATTAAGAACATGTGA

2301 GCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAGGCCGCTTGTGGCTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCT

2401 CAAGTCAGAGTGGCGAAACCCGACAGGACTATAAAGATACCAGCGTTTTCCCTGGAAGCTCCCTCGTGGCTCTCTGTTCCGACCTGCCGCTTAC

2501 CGGATACCTGTCGCTTCTCCCTCCGGAAGCGTGGCGTTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCCGCTCAAGCTG

2601 GGCTGTGTGCACGAACCCCGTTCAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACAGCACTTATCGCCACTGG

2701 CAGCAGCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGCCTAACTACGGCTACACTAGAAGAACAGT

2801 ATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTGGTAGCTCTTGATCCGGCAAAACAAACCACCGCTGGTAGCGGTGTTTTTTT

2901 GTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGTCTTTGATCTTTCTACGGGCTGTGACGCTCAGTGAACGAAAACCTCAGCTT

3001 AAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA