



EcoRI (23)

NotI (2) XbaI (19) SdaI (38) SpeI (45)

1 GCGGCCGCTCGACGATATCTAGAAATTCGGATCCTGCAGGGCCACTAGTCGCCTTGTGTGCCACTTTGGGACTTCCCTCCCTAGCCTGAGCTTCAGTT

Eco47III (197)

101 TTCTGCTGTAGGACAGCCCATGTCAACTGCACTTAGTAGCCGGGTTTGTATGCCGACAAGACGTGAAGTGGTGGAGGTGGCAGGATCCAGCGCT

201 ACCATCTTCTTGAACAGTGTCTCAACACATCGGATTTCTGTTCTCATCTGCAAAATGGGATCAGTGAAGCTCAGGTGGTCAAAATTTACAGGAA

EcoNI (404)

301 CTACTTTAGCCAAGCCCGCCCTGAAAGTTCCTCGGTGGGCTGTAGGGTATTGTTTTATCTGTGGGGTCCCTGATGCGTCCACCCACCAGC

401 CTTGGAGAGGGTGGGATGGGAGGTGGGGTCTTGGGGAGACAAGCCTAGAGCCTGGGCCCTCCACCCCACTGCCTCCCCATCCAGGGCCCCCAG

501 CCAGTGACAAAAGCCCGTGGCACTTCTCTACCCGGTTGGCAGGGCCCTGGCCAGCCCTTCTAAGGAAGGCATTTCTGCCTCCCTGGCCGGCC

601 GGGCTGGATGAGCCGGGAGCTCCTGCTGCCGGTCATACCACAGCCTTCTGCGCCCTGGGGCCAGGACTGCTGCTGCACTGCCATCCATTGGAGCC

BstXI (799)

701 CAGCACCCCTCCCCGCCATCCTTCGGACAGCACTCCAGCCAGCCCGCGTCCCTGTGTCCACTTCTCTGACCCCTCGGCCGCCACCCAGAAGGC

801 TGGAGCAGGACGCCGCTCGCTCCGGCCGCTGCTCCCTCGGGTCCCCGTGCGAGCCACGCCGGCCCCGTGCCGCCCGCAGCCCTGCCACTGGACAC

NcoI (937)

901 AGGATAAGGCCAGCGCACAGGCCCCACGTGGACACATGGAAATCAAGGTGCTGTTGCCCTCATCTGTATTGCTGTTGCTGAGGCAAAACCACTGA

1 M E I K V L F A L I C I A V A E A K P T E

BglII (1052)

1001 AATCAATGAAGACCTCAATATAGCTGTGGCTCCAACCTTTGCCACCACAGATCTTGAGACTGACCTGTTACCAACTGGGAGACCATGAATGTGATT

21 I N E D L N I A A V A S N F A T T D L E T D L F T N W E T M N V I

1101 AGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCCTGGCAAAAACCTCCCCAGATGCTCCTGAGGGAGCTGGAGGCCAATGCCA

55 S T D T E Q V N T D A D R G K L P G K K L P P D V L R E L E A N A

1201 GAAGGGCTGGTGCACAAGAGGCTGCCTCATTGCTCTCCACATTAAGTGCACCCCTAAGATGAAGAAATTTATCCCTGGCAGGTGCCACATTTATGA

88 R R A G C T R G C L I C L S H I K C T P K M K K F I P G R C H T Y E

1301 AGGTGAAAAGGAGTCTGCTCAGGAGGGATTGGAGAGCAATTTGTGATATCCAGAGATTCCTGGCTTCAAGGATAAGGAGCCACTGGACAGTTTATT

121 G E K E S A Q G G I G E A I V D I P E I P G F K D K E P L D Q F I

1401 GCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGTCTGAAGGGCCTTGCCAATGTCCAGTGTCTGACCTCTGAAGAAGTGGCTTCCAGAGGT

155 A Q V D L C A D C T T G C L K G L A N V Q C S D L L K K W L P Q R

NheI (1571)

1501 GTACCACCTTTGCCAGCAAGATTCAAGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGGGACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATT

188 C T T F A S K I Q G R V D K I K G L A G D R

1601 GATGAGTTTGGACAAACCACAACATAGAATGACGTGAAAAAATGCTTATTGTGAAATTTGTGATGCTATTGCTTTTGTAAACATTATAAGCTGCA

1701 ATAAACAAGTTAAACAACAACAAATTGCATTCAATTTATGTTTCAGTTCAGGGGAGGTGTGGGAGTTTTTAAAGCAAGTAAACCTCTACAATGTGG

1801 TATGGATTAATCTAAAATACAGCATAGCAAACTTTAACTCCAATCAAGCCTCACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCA

1901 GGGGCTGTTGCCAATGTGCATTAGCTGTTGACGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTGCTTTCATT

SspI (2050)

2001 TCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTAGTAAAAATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTA

2101 TTAGGCAGAACCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTTGGACAGCAAG

2201 AAAGCGAGCTTCTAGCTTATCTCAGTCTGCTCCTTGCACAAAGTGCACGAGTTGCCGGCCGGTCCGCGAGGGCGAACTCCCGCCCCACGGCTG

125 D Q E E A V F H V C N G A P D R L A F E R G W P Q

2301 CTCGCCGATCTCGTTCATGGCCGGCCGGAGGCGTCCGGAAAGTTCGTGGACACGACCTCCGACACTCGCGTACAGCTGCTCCAGGCCGCGCACCCAC

99 E G I E T M A P G S A D R F N T S V V E S W E A Y L E D L G R V W

SgrAI (2478)

2401 ACCCAGGCCAGGGTGTGTCGGCCACCCTGGTCTGGACCGCGCTGATGAACAGGGTCACTGCTCCGGACCACACCCGGCGAAGTCTGCTCCACGGA

65 V W A L T N D P V V Q D Q V A S I F L T V D D R V V G A F D D E V F

2501 AGTCCCGGAGAACCCGAGCCGGTCCGAGAACTGACCGCTCCGGCAGCTGCGCGCGGTGAGCACCCGGAACGGCACTGGTCAACTTGGCCATGAT

32 D R S F G L R D T W F E V A G A V D R A T L V P V A S T L K A M

2601 GGCTCCTCTGTCAGGAGAGGAAAGAGAAGGTTAGTACAATGCTATAGTGTGATTATACTATGCAGATATACTATGCCAATGATTAATTTGTC

2701 AAAGTGGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGCGGTTTTTCCATAGGCTC

2801 CGCCCCCTGACGAGCATCACAATAATCGACGCTCAAGTCAAGGTTGGCAAAACCCGACAGGACTATAAGATACCAGGCGTTTTCCCTGGAAGCTCCC

2901 TCGTGCCTCTCTGTTCCGACCTGCGCTTACCAGGATACCTGTCCGCTTTCTCCCTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGATAGTA

3001 TCTCAGTTCGGTGTAGTTCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCGACCGCTGCGCTTATCCGGTAACATATCGTCTTGAG

3101 TCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGATTTCTGAAGT

3201 GGTGGCCTAACCTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGGTTGGTAGCTCTTGATCCGG

3301 CAACAACCCACCGCTGGTAGCGTGGTTTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCTTTGATCTTTTCTACG

3401 GGGTCTGACGCTCAGTGGAAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA