



PvuI (7)
SgfI (6)
MfeI (82)

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAAGTGGCGCGGGTAAACTGGAAAGTGTGCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)

Psp1406I (203)
PvuII (239)
Bsu36I (291)

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACCGCGCCGCCCTACCTGAGGCC

301 GCCATCCACGCCGGTTGAGTCGCGTTTCTGCCGCTCCCGCCTGTGGTGCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCCCTGACCCTGCTTCAACTCTACGCTTTTGTTCGTTT

AgeI (552) BspHI (560)

501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTCAATCATGAACCTGAGCAGGGGAAGCCCCGCGAGTTGT

BglIII (636)
XmnI (667)

601 ATCCCTGATTCTGCGGTGGTTCCGGTAACTGCCAAGATCTCAAGGCTTTGAGAGGAGACTTACTGAATATATTCATTGTTTGCACCTGCTACTGGA

13▶ S L I P A V V S G N C Q D L K A F E R R L T E Y I H C L Q P A T G

BsrGI (733)

701 CGTGGAGAATGCTTCTTATAGTGGTATCTGTCTGACAGTACTGGTGCCTGGAAGTGGTTAATAGACCCTGAGACACAAAAGTGTCTTCTTACAT

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

801 CATTATGGAATCACCCATTTTTACCATTAGCTGTATCACTCTAATAGGCTTGTCTTTGCTGGAATACACAAGAGAGTAGTTGCACCATCAATTATAGC

80▶ S L W N H P F F T I S C I T L I G L F F A G I H K R V V A P S I I A

StuI (973)
AvrII (970)

901 TGCTCGATGTCGAACGGTATTAGCAGAATAACAATATGTCTTGTGATGATACAGGAAAATAATTTTGAACCTAGGCCTCATGTTCAATGACAATCTCA

113▶ A R C R T V L A E Y N M S C D D T G K L I L K P R P H V Q •

MscI (1009)
NheI (1003)

1001 CTCGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATG

HpaI (1141) MfeI (1152)

1101 CTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAGTTAAACAACAACAAATTCATTCTTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGT

EcoRI (1237)

1201 TTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTTCAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTT

1301 TCTGAGGGATGAATAAGGCATAGGCATCAGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTCTTTTCATGGAGTTTAAAGATATAGTGTAT

SapI (1419)
SspI (1476)
SwaI (1490)

1401 TTTCCAAGTGTGAACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAATATTCAGAAATAATTTAAATAC

EcoO109I (1551)

1501 ATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTGTAGTGTGGACTTAGGGAACAAA

1601 GGAACCTTAAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAG

SacI (1751)
BstXI (1780)

1701 CTTGCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCC

123▶ K G N M E I L V F C D P A Y D S I L E R C M G C P S V V R I S R D

1801 ACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCAGACAG

89▶ V E D S Y P H R V A V I T D F D K Q G N S V A S G I A I A E A C V T

StuI (1915)

1901 TGACCCTGCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCCGACATGGTGTCTGTTGTCCTCATAGAG

56▶ V R G I Y A E I H V A S I I E G T K T R I A A G V H H K N D E Y L

BbsI (2061)
XmnI (2057)

2001 CATGGTGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCTATAGTGAGTCGTATTATAC

23▶ M T I K E T A V E V L E L D Q Q S I N F T K M

AseI (2123)
SacI (2180)

2101 TATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACC

SpeI (2278)

2201 TCCCACGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCCAT

2301 TGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGAT

SnaBI (2406)

2401 GACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGG

NdeI (2511)

2501 GGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTA

PacI (2697)

PstI (2690)

SdaI (2689)

2601 CTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCCTGCAGGTTA

BspLU11I (2707)

2701 ATTTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATC

2801 ACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCC

2901 GACCCTGCCGTTACCGGATACCTGTCCGCTTCTCCCTTCGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTC

ApaLI (3021)

3001 GTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACAGC

3101 ACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTA

3201 CACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACCACCGCTGGT

3301 AGCGGTGGTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGA

EagI (3457)

PacI (3437) SwaI (3446) **NotI (3456)**

3401 ACGAAAACCTCACGTAAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGT

3501 GGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTG

3601 CCAGAACATTTCTATCGAA