



PvuI (7)
SgfI (6)
MfeI (82) **EcoNI (96)**

1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
HindIII (245) **Bsu36I (291)**

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCGCTACCTAGACTCAGCGGCTCTCCACGCTTTCCTGACCCGCTGTTGCTCAACTCTACGCTTTTGTTCGTTT

SphI (568) **NcoI (580)**

501 TCTGTTTGTCCGCGGTTACAGATCCAAGCTGTGACCGGCGCTACCTGAGATCACCGTAGGAGGGCCAGCATGCTTCTGGCCATGGTCTTACCTCTGCC
AgeI (552) **XcmI (565)** **MscI (577)**

BamHI (646)

601 CTGCTCCTGTGCTCCGTGGCAGGCCAGGGGTGTCCAACCTTGGCGGGATCCTGGACATCAACTTCTCATCAACAAGATGCAGGAAGATCCAGCTTCCA
 11▶ L L L C S V A G Q G C P T L A G I L D I N F L I N K M Q E D P A S

PstI (707)

701 AGTGCCACTGCAGTGCTAATGTGACCAGTTGTCTCTGTTGGGCATTCCCTCTGACAACCTGCACCAGACCATGCTTTCAGTGAGAGACTGTCTCAGATGAC
 44▶ K C H C S A N V T S C L C L G I P S D N C T R P C F S E R L S Q M T

ScaI (860)

801 CAATACCACCATGCAAAACAAGATACCCACTGATTTTCAGTCGGGTGAAAAATCAGTTGAAGTACTAAAGAACAACAAGTGTCCATATTTTTCTGTGAA
 77▶ N T T M Q T R Y P L I F S R V K K S V E V L K N N K C P Y F S C E

NcoI (916)
BbsI (949)

901 CAGCCATGCAACCAACCATGGCAGGCAACGCGTGACATTTCTGAAGAGTCTTCTGAAATTTCCAGAAAGAAAAGATGAGAGGGATGAGAGGCAAGA
 111▶ Q P C N Q T M A G N A L T F L K S L L E I F Q K E K M R G M R G K

MscI (1011)

1001 TATGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGA
 144▶ I •

HpaI (1143) **MfeI (1154)**

1101 TGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAAGTTAAACAACAACAATTGCATTCATTTTATGTTTCAGGTTCCAGGGGAGGTGTGGAG

EcoRI (1239)

1201 GTTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCT
 1301 TTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGT

SapI (1421)
SspI (1478) **SwaI (1492)**

1401 ATTTTCCCAAGTTTGAAGTCTCTTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTATAGTAAATATTCAGAAATAATTTAAAT

EcoO109I (1553)

1501 ACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACA
 1601 AAGAACCTTTAATGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACC
SacI (1753) **BstXI (1782)**

1701 AGCTTGCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACTGATGGATCTGT
 123▶ L 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 CCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCCAGCAGAC
 90▶ 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

StuI (1917)

1901 AGTGACCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCACTGTTGGTCTGATGGCCGCCCGACATGGTCTTGTGCTCATAG
 57▶ T 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

BbsI (2063)

2001 AGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTTCATGGTGGCCCTCTATAGTGAGTCGTATTAT
 23▶ L M T I K E T A V E V L E L D Q Q S I N F T K M

XmnI (2059)

2101 ACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGCTCTGCTTATATAGA
AseI (2125) **SacI (2182)**

SpeI (2280)

2201 CCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTGTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCC
 2301 ATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCG

SnaBI (2408)

2401 ATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAG

NdeI (2513)
 2501 GGGGCGTACTTGGCATATGATACTTGTACTGCTCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGT

PacI (2699)
PstI (2692)
SdaI (2691)
 2601 TACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGGTCTGTTGGGCGGTGAGCCAGGCGGGCCATTACCGTAAAGTTATGTAACGCCTGCAGGT

BspLU11I (2709)
 2701 TAAITTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAGGCCGCTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCA

 2801 TCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGGCTCTCCTGTT

 2901 CCGACCCTGCCGTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGG

ApaLI (3023)
 3001 TCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACA

 3101 CGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGC

 3201 TACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTG

 3301 GTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTACGGGGTCTGACGCTCAGTG

EagI (3459)
PacI (3439) SwaI (3448) NotI (3458)
 3401 GAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTATTACATCTGTGTG

 3501 TTGGTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGG
 3601 TGCCAGAACATTTCTCTATCGAA