



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCGCTACCTGAGGCC

301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTAACTCTACGTCTTTGTTTCGTTT

XcmI (560) **NcoI (560)**

KasI (535)
BstEII (555)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTACCATTGGCTATGATGGAGGTCCAGGGGGACCCAGCCTGGG

1▶ M A M M E V Q G G P S L G

BsaBI (615) **PstI (637)**
SmaI (585)

601 ACAGACCTGCGTGTGATCGTGATCTTACAGTGTCTTGCAGTCTCTGTGTGGTGTAACTTACGTGACTTTACCAACGAGCTGAAGCAGATGCAG

13▶ Q T C V L I V I F T V L L Q S L C V A V T Y V Y F T N E L K Q M Q

701 GACAAGTACTCCAAAAGTGGCATTGCTTGTTCCTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAAGAGAGTATGAACAGCCCTGCTGGCAAG

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

801 TCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGGAACTCTGAGGAAACATTTTACAGTTTCAAGAAAAGCAAAAAATTTTCTCCCT

80▶ V K W Q L R Q L V R K M I L R T S E E T I S T V Q E K Q Q N I S P L

BbsI (969)

901 AGTGAGAGAAAGAGGTCCTCAGAGAGTAGCAGCTCACATAACTGGACAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAGGCT

113▶ V R E R G P Q R V A A H I T G T R G R S N T L S S P N S K N E K A

1001 CTGGGCGCAAAAATAAATCCTGGGAATCATCAAGGAGTGGGCATTTCCTGAGCAACTTGCACCTGAGGAATGGTGAAGTGGTATCCATGAAAAAG

147▶ L G R K I N S W E S S R S G H S F L S N L H L R N G E L V I H E K

1101 GGTTTACTACATCTATTCCAAAACATACTTTTCGATTTTCAGGAGGAAATAAAAGAAAACAAAAGAACGACAAAACAAATGGTCCAATATATTTACAAAATA

180▶ G F Y Y I Y S Q T Y F R F Q E E I K E N T K N D K Q M V Q Y I Y K Y

1201 CACAAGTTATCCTGACCCTATATTGTTGATGAAAAGTGTAGAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGGGGA

213▶ T S Y P D P I L L M K S A R N S C W S K D A E Y G L Y S I Y Q G G

1301 ATATTTGAGCTTAAGGAAAATGACAGAATTTTGTTCGTAACAAATGAGCACTTGTAGACATGGACCATGAAGCCAGTTTTTTGGGGCCTTTTATAG

247▶ I F E L K E N D R I F V S V T N E H L I D M D H E A S F F G A F L

MscI (1414) **NheI (1408)**

1401 TTGGCTAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGCAAACCAACTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTG

280▶ V G •

HpaI (1546) **MfeI (1557)**

1501 TGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCTTTTATGTTTCAGGTTTCAGGGGGAGGTGTGG

EcoRI (1642)

1601 GAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAAT

1701 CCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAG

SapI (1824) **SwaI (1895)**

1801 TGTATTTTCCAAGGTTTGAAGTCTTCTTCTTTATGTTTTAAATGACTGACCTCCACATTCCTTTTATGAAAATATTCAGAAAATAATTTA

1901 AATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGA

2001 ACAAAGGAACCTTTAATAGAAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGGAGGGGATGAGTTCTCAATGGTGGTTTTG

141▶ • N R T Y K L P I L E E I T T K

SacI (2156) **BstXI (2185)**

2101 ACCAGCTTGCCATTCATCTCAATGAGCACAAGCAGTCAGGAGCATGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCCTGATGGATC

124▶ V 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

2201 TGTCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACA

91▶ D 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

StuI (2320)

2301 GACAGTGACCCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTGCTTGTGTCTCA

58▶ V 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

BbsI (2466) **XmnI (2462)**

2401 TAGAGCATGGTATCTTCTCAGTGGCGACCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCCTATAGTGAGTCGTAT

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

AseI (2528)
SacI (2585)

2501 TATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAACGAGCTCTGCTTATAT

SpeI (2683)

2601 AGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCCTTGATTTACTAGTCAAACAAACT
2701 CCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATA

SnaBI (2811)

2801 GCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTACTGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAA

NdeI (2916)

2901 TAGGGGGCGTACTTGGCATATGATACACTTGTACTGCCAAGTGGGAGTTTACCATAACTCCACCCATTGACGTCAATGAAAGTCCCTATTGG

PstI (3095)

SdaI (3094)

3001 CGTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCA

PacI (3102) BspLU11I (3112)

3101 GGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGCGTTTTTCCATAGGCTCCGCCCCCTGACGA

3201 GCATCAGAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGTCCCTCGTGGCTCTCCT

3301 GTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGT

ApaLI (3426)

3401 AGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTGAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAG

3501 ACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTAC

3601 GGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACCCG

3701 CTGGTAGCGGTGGTTTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCA

EagI (3862)

PacI (3842) SmaI (3851) NotI (3861)

3801 GTGGAACGAAAACACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGCCGCAATAAAATATCTTTATTTTATTACATCTGT

3901 GTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGAAGTGC

4001 AGGTGCCAGAACATTTCTATCGAA