



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC

301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441) **NaeI (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

KasI (535)
AgeI (552) **BspHI (560)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCATCATGACCTCTAGGAAGAAAGTGTGCTGAAGGTTATCAT

1▶ M T S R K K V L L K V I I

BbsI (621) **BspHI (632)**

601 CCTGGGAGATTCTGGAGTCGGGAAGACATCACTCATGAACAGTATGTGAATAAGAAATTCAGCAATCAGTACAAAGCCACAATAGGAGCTGACTTTCTG

13▶ L G D S G V G K T S L M N Q Y V N K K F S N Q Y K A T I G A D F L

XcmI (701)

701 ACCAAGGAGTGATGGTGGATGACAGGCTAGTCACAATGCAGATATGGGACACAGCAGGACAGGAACGGTTCAGTCTCTCGGTGGCCTTCTACAGAG

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

801 GTGCAGACTGCTGCTTCTGGTATTTGATGTGACTGCCCAACACATTCAAACCTAGATAGCTGGAGAGATGAGTTTCTCATCCAGGCCAGTCCCGG

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

MscI (962)

901 AGATCCTGAAAACCTCCATTTGTTGTGTTGGGAAACAAGATTGACCTCGAAAACAGACAAGTGGCCACAAGCGGGCACAGGCTGGTGTACAGCAA

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

BstXI (1037)

1001 AACAACTCCCTACTTTGAGACCAGTGCCAAGGAGGCCATCAACGTGGAGCAGGCGTTCAGACGATTGCACGGAATGCACTTAAGCAGGAAACGGAGG

147▶ N N I P Y F E T S A K E A I N V E Q A F Q T I A R N A L K Q E T E

BsrGI (1106) **PstI (1173)**

1101 TGGAGCTGTACAACGAATTTCTGAACCTATCAAAGTGGACAAGAATGACCGGGCCAAGGCTCGGCAGAAAGCTGCAGTTGCTGAGGGGCGAGTGAGAG

180▶ V E L Y N E F P E P I K L D K N D R A K A S A E S C S C •

MscI (1231)

1201 TTGAGCACAGAGTCTTCAAAACCCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGC

HpaI (1363) **MfeI (1374)**

1301 TTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAAACAACCTGCATTCTTTATGTTTCAGG

EcoRI (1459)

1401 TTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAAT

1501 CAAGCCTCTACTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCA

SspI (1698)

1601 TGGAGTTTAAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAA

SwaI (1712)
EcoO109I (1773)

1701 TATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTA

1801 GTAGTTGGACTTAGGGAACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGGGGGATGAGTT

141▶ • N R T Y K L P I L E

SacI (1973)

1901 CCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCT

130▶ E I T T K 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

BstXI (2002)

2001 GACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATG

97▶ V V R I S R 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

2101 GCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCGACAT

63▶ A I A E A C 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

BspHI (2287)

BbsI (2283)

XmnI (2279)

2201 GGTGCTTGTGCTCCTCATAGAGCATGGTGTCTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCT

30▶ H K N D E 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 (2345)

2301 CCTATAGTGAGTCGATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTA

2400 SacI (2402) AACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATT

2500 SpeI (2500) TACTAGTCAAAACAAACTCCCATTTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTIONGCAAAA

2599 SnaBI (2628) CCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAAGTCATGTACTGGGCATAATGCCAGGCGGGCCAT

2699 NdeI (2733) TTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTC

2799 AATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGGCGGGTTCGTTGGCGGTCAGCCAGGCGGGCCATTTACCGT

2899 PstI (2912) SdaI (2911) PacI (2919) BspLU11I (2929) AAGTTATGTAACGCTG C A G G T T A A T T A A G A A C A T G T G A G C A A A A G G C C A G A A A C C G T A A A A A G C C G C G T T G C T G G C G T T T T C C A

2997 TAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCTGGA

3097 AGCTCCCTCGTGGCTCTCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCT

3197 ApaLI (3243) GTAGGTATCTCAGTTCGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCGACCGCTGCGCCTTATCCGGTAACTATCG

3297 TCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTTC

3397 TTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTT

3497 GATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTT

3597 PacI (3659) SwaI (3668) EagI (3679) NotI (3678) TTCTACGGGTCTGACGCTCAGTGAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCCAATAAATAT

3697 CTTTATTTTCATTACATCTGTGTGTTGGTTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAAACAAAACGAAACAAAACAACTAGCAAAATA

3797 GGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA