



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAAGTGGCGCGGGTAAACTGGAAAGTGTCTGTACTGGCTCCGCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
HindIII (245)
Bsu36I (291)
PvuII (239)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTCACGCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTCCTGACCTGCTTCTCAACTCTACGCTTTTGTTCGTTT

BstEII (555)
AgeI (552) **NcoI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACTCTGAGATCACCGGTACCATGGGCACCCGCGACGACGAGTACGACTACCTTTTAA
601 AGTTGTCCTTATTGGAGATTCTGGTGTGGAAAGAGTAATCTCCTGTCTCGATTTACTCGAAATGAGTTTAACTGAAAGCAAGAGCACCATTGGAGTA
13▶ V V L I G D S G V G K S N L L S R F T R N E F N L E S K S T I G V
1▶ M G T R D D E Y D Y L F K

BstXI (720)
EcoRV (776)
701 GAGTTTGCAACAAGAAGCATCCAGGTTGATGGAAAAACAATAAAGGCACAGATATGGGACACAGCAGGGCAAGAGCGATATCGAGCTATAACATCAGCAT
47▶ E F A T R S I Q V D G K T I K A Q I W D T A G Q E R Y R A I T S A

NdeI (854)
801 ATTATCGTGGAGCTGTAGGTGCCTTATTGGTTTATGACATTGCTAAACATCTCACATATGAAAATGTAGAGCGATGGCTGAAAGAAGTACGAGATCATGC
80▶ Y Y R G A V G A L L V Y D I A K H L T Y E N V E R W L K E L R D H A
901 TGATAGTAACATTGTTATCATGCTTGTGGGCAATAAGAGTGATCTACGTCATCTCAGGGCAGTTCTACAGATGAAGCAAGAGCTTTTGCAAAAAGAAT
113▶ D S N I V I M L V G N K S D L R H L R A V P T D E A R A F A E K N
1001 GGTGTTGTCATTGAAACTTCGGCCCTAGACTCTACAAATGTAGAAGCTGCTTTTCAGACAATTTAACAGAGATTTACCGCATTGTTTCTCAGAAGC
147▶ G L S F I E T S A L D S T N V E A A F Q T I L T E I Y R I V S Q K

BspLU11I (1124)
1101 AAATGTCAGACAGACGCGAAAATGACATGTCTCAAGCAACAATGTGGTTCCTATTATGTTCCACCAACCACTGAAAACAAGCCAAAGGTGCAGTGTCTG
180▶ Q M S D R R E N D M S P S N N V V P I H V P P T T E N K P K V Q C C

MscI (1246)
NheI (1240)
1201 TCAGAACATCTAAGGCATTTCTCTTCTCCCTAGAAGGCTGTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGACAAACCACAACCTAGAATG
213▶ Q N I •

HpaI (1378) **MfeI (1389)**
1301 CAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAACATTCATTC

EcoRI (1474)
1401 ATTTTATGTTTCAGGTTACAGGGGAGGTGTGGGAGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAAA
1501 CTTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAG

SapI (1656)
1601 CCTCACCTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGTTTGAAGTCTCTCATTCTTTATGTTTTAAATGCACTGACCTCCACATT

SspI (1713)
SwaI (1727)
EcoO109I (1788)
1701 CCCTTTTGTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATA
1801 ATATCCCCAGTTTGTAGTGGACTTAGGGAACAAAGAACCTTTAATAGAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACT
141▶ • N R T Y K

SacI (1988)
1901 TGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCA
135▶ L P I L E 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

BstXI (2017)
2001 CATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTC
102▶ M G C P S 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

StuI (2152)
2101 ACAGCAGACCAATGGCAATGGCTTACAGCAGACAGTACCCTGCCAATGTAGGCCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTTGGCTCTGA
68▶ V A S G I 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

BbsI (2298)
XmnI (2294)
2201 TGGCCGCCCCGACATGGTGTGTTGTCCTCATAGAGCATGGTGTCTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGT
35▶ A A G V H 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

2301 CTT**CATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAA**AACAGCGTGGATGGCGTCTCCAGC**TTAT**
2401 CTGACGGTTCAC**TAAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGCCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGG**A

2501 AAGTCCC**GTTGATTTACTAGT**CAAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCAGCC**CATTGA**

2601 TG**TACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATG**

2701 CCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAA**ATACTCC**

2801 ACCCATTGACGTCAATGGAAAGTCCCTATTGGCGT**TACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGT**CAGCCAGCGG

2901 GGCCATTTACCGTAA**GTTATGTAACGCCTGCAGGTTAATTAAGA**ACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAGCCGCGTTGCTG

3001 GCGTTTTTCCATAGGCTCCGCC**CCCTGACGAGCATCACAAAATCGACGCTCAAGT**CAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGCG**CT**

3101 TTCC**CCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCA**

3201 TAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTT**CGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTT**CAGCCCACCGCTGCGC**TTATCC**

3301 GGTA**ACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTG**

3401 CTACAGAGTTCTTGAAGTGGTGGCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCG**AAAAAGAGT**

3501 TGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAG**AAGAT**

3601 CCTTTGATCTTTTCTACGGG**CTGACGCTCAGTGGAAACGAAAAC**TACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGG**CCG**

3701 CAATAAAATATCTTTATTTT**CATTACATCTGTGTGTTGTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAAA**

3801 CTAGCAAATAGGCTGTCC**CCAGTGCAAGTGCAGGTGCCAGA**ACATTTCTCTATCGAA

AseI (2360)

SacI (2417)

SpeI (2515)

SnaBI (2643)

NdeI (2748)

PacI (2934)

PstI (2927)

SdaI (2926)

BspLU11I (2944)

ApaLI (3258)

EagI (3694)

PacI (3674) SwaI (3683) NotI (3693)