



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAAGTGGCGGGGTAACCTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) **PvuII (239)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGGCCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTAACTCTACGCTTTTGTTCGTTT

NcoI (560)
BstEII (555)
KasI (535) **AgeI (552)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTACCATGAGGCTAGGCTCTGTGCTTCTGATGGTCTGCGGGT
1 M A R L C A F L M V L A V

MscI (610) **Bsu36I (654)**
601 GCTGAGCTACTGGC CAACCTGCTCTCTAGGATGTGACCTGCCTCAGACTCATAACCTCAGGAACAAGAGAGCCTTAACTCCTCGTAAATAAGGAG
13▶ L S Y W P T C S L G C D L P Q T H N L R N K R A L T L L V K M R R
700 ACTCTCCCCTCTCTCCTGCTGAAAGGACAGAAAGGACTTTGGATTCCCA CAGGAGAAGGTGGGTGCCAGCAGATCCAGGAGGCTAAGCCATCCCTGT
46▶ L S P L S C L K D R K D F G F P Q E K V G A Q Q I Q E A Q A I P V
799 CCTGACTGAGCTGACCCAGCAATCCTGACCCCTTCCATCAAAGGACTCATCTGCTGCTTGGAAATGCAACCCCTCCTAGACTATTCTGAATGACCTC
79▶ L T E L T Q Q I L T L F T S K D S S A A W N A T L L D S F C N D L
899 CAC CAGC T GCTCAATGACCTG CAAGGCTGTCTGATGCAGCAGGTA G A G A T A C A G G C A C T T C C C C T G A C C C A G G A A G A C T C C C T G C T G G C T G T G A G G
113▶ H Q L L N D L Q G C L M Q Q V E I Q A L P L T Q E D S L L A V R
995 ACATACTTCCACAGGATCACTGTGTTCTGAGAGAGAAGAAACACAGCCCTGTGCCTGGGAGGTGGTCAGAGCAGAAGTCTGGAGAGCCCTGTCTTCTC
145▶ T Y F H R I T V F L R E K K H S P C A W E V V R A E V W R A L S S

PvuII (901) **MscI (1138)**
1095 CAGCCAAGTTGCTGGCAAGACTGAGTGAGGACGAGTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCA
178▶ S A K L L A R L S E D E •

HpaI (1270) **MfeI (1281)**
1195 GTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAACAAACAATTGCATTCAT

EcoRI (1366)
1295 TTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACT
1395 TTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTCAGCC

SapI (1548)
1495 TCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTCCCAAGGTTGAACTAGCTCTTCATTCTTTATGTTTAAATGCACTGACCTCCACATTCC

SspI (1605) **SwaI (1619)** **EcoO109I (1680)**
1595 CTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAAT
1695 ATCCCCAGTTTAGTGTGGACTTAGGAACAAGGAACCTTTAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTG
141▶ • N R T Y K
SacI (1880)

1795 AGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACA
134▶ 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 M
BstXI (1909)
1895 TGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCAC
101▶ 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 V
StuI (2044)
1995 AGCAGACCAATGGCAATGGCTTCCAGCAGACAGTACCCTGCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGTATG
68▶ 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
XmnI (2186)
2095 GCCGCCCCGACATGGTGTCTGTTGCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCT
34▶ 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 K
AseI (2252)
2195 TCATGGTGGCCCTCTATAGTGAAGTCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGATGGCGTCTCCAGCTTATCT
1▶ M

SacI (2309)
2295 GACGGTCTACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAA

SpeI (2407)
2395 GTCCCGTTGATTTACTAGTCAAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATG

2495 TACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTCCCAAGTAGGAAAGTCCCATAAGGTCATGTAAGTGGGCATAATGCC
SnaBI (2535)

2595 AGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTAAGTGGGCAGTTTACCCTAAATACTCCAC
NdeI (2640)

2695 CCATTGACGTCAATGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGG
PacI (2826)

2795 CCATTTACCGTAAGTTATGTAACGCTGCAGGTTAATTAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGC
PstI (2819) **SdaI (2818)** **BspLU11I (2836)**

2895 GTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGGAAACCCGACAGGACTATAAAGATACCAGGCGTTT
BspLU11I (2836)

2995 CCCCCTGGAAGCTCCCTCGTGGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATA
ApaLI (3150)

3095 GCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGACGAACCCCCGTTACGCCGACCCTGCGCTTATCCGG
ApaLI (3150)

3195 TAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCT
ApaLI (3150)

3295 ACAGAGTTCTTGAAGTGGTGGCCTAACTACGGTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTG
ApaLI (3150)

3395 GTAGCTCTTGATCCGGCAAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCC
ApaLI (3150)

3495 TTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGCCGCA
EagI (3586) **PacI (3566)** **SwaI (3575)** **NotI (3585)**

3595 ATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTTGTGTAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACT
EagI (3586)

3695 AGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA
EagI (3586)