



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGGGGTAACGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTACAGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

KasI (535)
AgeI (552) **BspLU11I (560)**

501 TCTGTTCTGCGCGGTTACAGATCCAAGCTGTGACCGCGGCTACCTGAGATCACCGGTCAACATGTACCAGGTGGTTGCATTCTTGGCAATGGTCATGGG
1▶ M Y Q V V A F L A M V M G

PvuII (624)

601 AACCCACACCTACAGCCACTGGCCAGCTGCTGCCAGCAAAGGGCAGGACCTCTGAGGAGCTGCTGAGGTGGAGACTGTGCCTGTGCCTCCCTA
 13▶ T H T Y S H W P S C C P S K G Q D T S E E L L R W S T V P V P P L
 701 GAGCCTGTAGGCCAACCGCCACCCAGAGTCTGTAGGGCCAGTGAAGATGGACCCCTCAACAGCAGGGCCATCTCCCTGGAGATATGAGTTGGACA
 47▶ E P A R P N R H P E S C R A S E D G P L N S R A I S P W R Y E L D

EcoO109I (821)
XmaI (890)

801 GAGACTTGAACCGGCTCCCGAGGACCTGTACCACGCCGTTGCTGTGCCGCACTGCGTCAGCCTACAGACAGGCTCCACATGGACCCCGGGCAA
 80▶ R D L N R L P Q D L Y H A R C L C P H C V S L Q T G S H M D P R G N

BbsI (928)
NcoI (948)

901 CTCGGAGCTGCTTACCACAACAGACTGTCTTCTACCGGCGCCATGCCATGGCAGAAAGGGCACCCACAAGGGTACTGCCTGGAGCGCAGGCTGTAC
 113▶ S E L L Y H N Q T V F Y R R P C H G E K G T H K G Y C L E R R L Y

MscI (1054)

1001 CGTGTTCCTTAGCTTGTGTGTGTGCGGCCCGTGTGATGGGCTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAA
 147▶ R V S L A C V C V R P R V M G •

HpaI (1186) **MfeI (1197)**

1101 CTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAAACAACA
 1201 TTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTTAAAATACAGCA

EcoRI (1282)

1301 TAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTCATTAGCT
 1401 GTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGTTTGAAGTACTCTTTCATTTCTTATGTTTTAAATGCACTGACCT

SspI (1521)
SwaI (1535)
EcoO109I (1596)

1501 CCCACATTCCTTTTATGATAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGC
 1601 CCTTCATAATATCCCCAGTTTAGTGTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCT
141▶ • N R

SacI (1796)

1701 GGTGACTTGGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGC
 138▶ T Y K 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

BstXI (1825)

1801 TCTCTGCACATGCCACAGGGGCTGACCCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCC
 104▶ E R C 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

StuI (1960)

1901 CGTTGCTCACAGCAGACCAATGGCAATGGCTTCCAGCAGACAGTACCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTT
 71▶ N S 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
 2001 GGTCTGATGGCCGCCCCGACATGGTGTGTTGTTGCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCTGCTGAGAGATG
 38▶ T R I 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

BspHI (2110)
BbsI (2106)
AseI (2168)

2101 TTGAAGTCTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGATGGCGTCTC
 4▶ N F T K M

SacI (2225)

2201 CAGCTTATCTGACGGTTCACTAAACGAGCTCTGTTATATAGACCTCCACCGTACACGCTACCGCCATTGCGTCAATGGGCGGAGTTGTTACGAC

SpeI (2323)

2301 ATTTTGGAAAGTCCCCTGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGTGGAGACTTGAAATCCCCTGAGTCAAACCGCTATCCAC

SnaBI (2451)

2400 GCCATTGATGTAAGTCCAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTCCAAAGTAGGAAAGTCCATAAGTTCATGTAAGT

2500 GGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGT
2600 AAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTC

2700 AGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGG
2798 CCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAG
2898 ATACCAGGCGTTTCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTG

2998 GCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCT
3098 GCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTA
3198 TGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTC
3298 GGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGAT

3398 CTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAA

3498 ATC AGCGGCCGCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGA
3598 AACAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA