



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
Bsu36I (291)

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACACGCCGCCGCCCTACCTGAGGCC
 301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

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

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCCCTACCTGAGATCACCGGTCAACATGTTGGTGACATACCTTGCCTCTGTTTTGCTCTT
1▶ M L V T Y I L A S V L L F

PstI (699)

601 CAGTTCTGTGCTGGGCCAGAGATGCAGCACCACATGGGCATCAGAGACCAATTACCTTATTGAAATCTGAAGGATGATCCACCGTCAAAATGCAGC
 13▶ S S V L G Q R C S T T W G I R D T N Y L I E N L K D D P P S K C S

DraIII (756)

701 TGCAGCGGCAACGTGACCAGCTGCTTGTGTCTCTCCGTCCTCAACTGATGATTGTACACACCGTGTACAGGGAGGGACTGTTACAGCTGACCAATGCCA
 47▶ C S G N V T S C L C L S V P T D D C T T P C Y R E G L L Q L T N A

BbrPI (867)

801 CACAGAAATCAAGACTCTTGCTGTTTTCCATCGGGTAAAAGGATAGTTGAAGTCTAAAGAACATCACGTGTCCGTCCTTTTCTGCGAAAAGCCATG
 80▶ T Q K S R L L P V F H R V K R I V E V L K N I T C P S F S C E K P C

NheI (997)

901 CAACCAGACCATGGCAGGCAACACACTGTCATTCTGAAGAGTCTCCTGGGACGTTCCAGAAGACAGAGATGCAAAGGCAGAAAAGCCGACCATGAGCT
 113▶ N Q T M A G N T L S F L K S L L G T F Q K T E M Q R Q K S R P •

MscI (1003)

1001 AGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTG

HpaI (1135)
MfeI (1146)

1101 CTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTATTTTATGTTTCAGGTTACAGGGGAGGTGTGGGAGGTTTTTTA

EcoRI (1231)

1201 AAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAG
 1301 GGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCC

SspI (1470)
SwaI (1484)

1401 AAGGTTTGAAGTACTGCTCTTCATTCTTTATGTTTTAAATGCACTGACCTCCCACATTCCTTTTATAGTAAAATATTCAGAAATAATTTAAATACATCATT

EcoO109I (1545)

1501 GCAATGAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACC
 1601 TTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGCTGACTTGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCC

SacI (1745)
BstXI (1774)

1701 ATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCA
 121▶ 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 D V E
 1801 TCAGAGTAGGGGTGCCTGACAGCCAAATGGTGTCAAAGTCTTCTGCCCGTTGCTCAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTGACCC
 87▶ 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 V T V R

StuI (1909)

1901 TGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTTGGTCTGATGGCCGCCCGACATGGTGTGTTGTCTCATAGAGCATGGT
 54▶ 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 Y L M T

BspHI (2059)

2001 GATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCC
 21▶ I K E T A V E V L E L D Q Q S I N F T K M

BbsI (2055)

2101 GATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGC T TATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCAC

SacI (2174)

2201 CGTACACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACG

SpeI (2272)

2300 TCAATGGGTTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTA

2400 **SnaBI (2400)**
ATACGTAGATGTAAGTCCCAAGTAGGAAAGTCCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGT

2500 **NdeI (2505)**
AC TTGGCATATGATACACTTGATGTAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTACTATG

2600 **PstI (2684)**
SdaI (2683)**PacI (2691)**
GGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAAC**GCTG CAGGTTAA TT**

2698 **BspLU11I (2701)**
AAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACA
←

2798 AAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCGTGAAGCTCCCTCGTGCCTCTCTGTTCCGAC

2898 CCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTT

2998 **ApaLI (3015)**
CGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCCAGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACAGACT

3098 TATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACAC

3198 TAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTTTGATCCGGCAAACAAACCACCGCTGGTAGC

3298 GGTGGTTTTTTTGGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGAACG

3398 **EagI (3451)**
PacI (3431) **Swal (3440)** **NotI (3450)**
AAAAC TACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGT

3498 TTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCA

3598 GAACATTTCTCTATCGAA