



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCGCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTGCCTGTTGCGCCTCCCGCCTGTGGTGCCTCCTGAAGTGCCTCCGCGCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

BspLU11I (560)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCAACATGTTGCCATTATTCTTTTTCGACGCTGCTTTCTCC
 601 CATATTGACTGAATCTGAGAAGCAACAGTGGTTCTGCAACTCCTCCGATGCAATTATTTCTACAGTTATTGTGATCACTTGAATTTCCCTATTTCGAAT
 13▶ I L T E S E K Q Q W F C N S S D A I I S Y S Y C D H L K F P I S I

SspI (776)

701 AGTTCTGAACCTGCATAAGACTGAGGGGAACCAATGGATTTGTGCATGTTGAGTTCATTCCAAGAGGAACTAAAAATTTTATATTCAACCTATTCA
 47▶ S S E P C I R L R G T N G F V H V E F I P R G N L K Y L Y F N L F

NcoI (846)

801 TCAGTGTCAACTCCATAGAGTTGCCGAAGCGTAAGGAAGTTCTGTGCCATGGACATGATGACTATTCTTTTTGCAGAGCTCTGAAAGGAGAGACTGT
 80▶ I S V N S I E L P K R K E V L C H G H D D D Y S F C R A L K G E T V

Bsu36I (940)

901 GAATACATCAATACCATTCTCTTTGAGGGAATACTATTTCTAAGGGCCATTACAGATGTGTTGCAGAGCTATTGCTGGGATACTGAAGAAAAGCTC
 113▶ N T S I P F S F E G I L F P K G H Y R C V A E A I A G D T E E K L

MscI (1061)

1001 TTCTGTTTGAATTTACCATCATTACCAGCGGTGATGCAATTAGAATATGCTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAA
 147▶ F C L N F T I I H R R D V N •

HpaI (1193)

1101 ACCACAAC TAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAAGTTAAACA

MfeI (1204)
EcoRI (1289)

1201 ACAACAATTGCATTCAATTTATGTTTCAGGTTCCAGGGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAA
 1301 TACAGCATAGCAAACTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGC
 1401 ATTAGCTGTTTGACGCTCACCTCTTTTATGAGTAAAGATATAGTATTTTCCCAAGTTTGAAGTACTGCTCTTCAATTTCTTTATGTTTTAAATGCA

SspI (1528) **Swal (1542)**

1501 CTGACCTCCACATTCCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAAATAATGTTTTTTATTAGGCAGAATCCAGATGC

EcoO109I (1603)

1601 TCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGAACCTTTAATAGAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTT
 1701 AGTTCCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGA
 140▶ N R 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

BstXI (1832)

1801 GATGAGCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCC
 107▶ I L 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

StuI (1967)

1901 TTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCC
 73▶ K Q G 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
 2001 CAGTCTTGGTCTGATGGCCGCCGACATGGTCTTGTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCTGCTG
 40▶ T K 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

BspHI (2117) **BbsI (2113)**
AseI (2175)

2101 AGAGATGTTGAAGGCTTTCATGATGGCCCTCCTATAGTGAGTCGATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATG
 7▶ S I N F T K M
 2201 CGCTCCAGCTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCCTACACGCTACCGCCAATTTGCGTCAATGGGGCGGAGTT

SpeI (2330)

2300 GTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCG

SnaBI (2458)

2399 CTATCCACGCCATTGATGTAAGTGCACAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTGCACAAAGTCCATAAGGTC

NdeI (2563)

2499 ATGTA CTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTA CTGCCAAGTGGGCAG

2599 TTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTT

PstI (2742)
SdaI (2741) PacI (2749) BspLU11I (2759)

2699 GGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCCTG 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 C A A A A G G C C A G G A A C C G

2797 T A A A A G G C C G C G T T G C T G G C G T T T T T C C A T A G G C T C C G C C C C C T G A C G A G C A T C A C A A A A A T C G A C G C T C A A G T C A G A G G T G G C G A A A C C C G A C A G G A

2897 C T A T A A G A T A C C A G G C G T T T C C C C T G G A A G C T C C C T C G T G C G C T C T C T G T T C C G A C C T G C C G C T T A C C G G A T A C C T G T C C G C T T T T C T C C C T T C G G

ApaLI (3073)

2997 G A A G C G T G G C G C T T T C T C A T A G C T C A C G C T G T A G G T A T C T C A G T T C G G T G T A G G T C G T T C G T C C A A G C T G G G C T G T G T G C A C G A A C C C C C G T T C A G C C

3097 C G A C C G T G C G C C T T A T C C G G T A A C T A T C G T C T T G A G T C C A A C C C G T A A G A C A C G A C T T A T C G C C A C T G G C A G C A G C C A C T G G T A A C A G G A T T A G C A G A

3197 G C G A G G T A T G T A G G C G G T G C T A C A G A G T T C T T G A A G T G G T G G C C T A A C T A C G G C T A C A C T A G A A G A A C A G T A T T T G G T A T C T G C G C T C T G C T G A A G C C A G

3297 T T A C C T T C G G A A A A G A G T T G G T A G C T C T T G A T C C G G C A A A C A A A C C C G C T G G T A G C G G T G G T T T T T T G T T T G C A A G C A G C A G A T T A C G C G C A G A A A

PacI (3489)

3397 A A A A G A T C T C A A G A A G A T C C T T T G A T C T T T T C T A C G G G G T C T G A C G C T C A G T G G A A C G A A A A C T C A C G T T A A G G G A T T T T G G T C A T G G C T A G T T A A T T A

EagI (3509)
SwaI (3498) NotI (3508)

3497 A C A T T T A A A T C A G C G G C C G C A A T A A A A T A T C T T T A T T T T C A T T A C A T C T G T G T T G G T T T T T T G T G A A T C G T A A C T A A C A T A C G C T C C A T C A A A A

3597 C A A A A C G A A A C A A A A C A A A C T A G C A A A A T A G G C T G T C C C C A G T G C A A G T G C A G G T G C C A G A A C A T T T C T A T C G A A