



100

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

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
Bsu36I (291)

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGCTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NgoMI (441)
NaeI (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGCTCAACTCTACGCTTTGTTTCGTTT

SphI (560)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTGACAGCTCAACAGTACCAGCAGCAGCGTCGAAAATT
 601 TGCAGCTGCCTTCTGGCATTCAATTTTCACTGGCAGCTGTGGATACTGCTGAAGCAGGGAAGAAAGAGAAACAGAAAAAAGTGAAGAAGTCTGAC
 13▶ A A A F L A F I F I L A A V D T A E A G K K E K P E K K V K K S D
 701 TGTGGAGAATGGCAGTGGAGTGTGTGTGTGCCACCACTGGAGACTGTGGGCTGGGCACACGGGAGGGCACTCGGACTGGAGTGAAGTGAAGCAAAACA
 47▶ C G E W Q W S V C V P T S G D C G L G T R E G T R T G A E C K Q T

StuI (872)
Eco147I (872)

801 TGAAGACCCAGAGATGTAAGATCCCTGCAACTGGAAGAAGCAATTTGGCGGGAGTGCAAATACCAGTTCACAGCCTGGGGAGAATGTGACCTGAACAC
 80▶ M K T Q R C K I P C N W K K Q F G A E C K Y Q F Q A W G E C D L N T
 901 AGCCCTGAAGACCAGAAGTGAAGTCTGAAGCGAGCCCTGCACAATGCCGAATGCCAGAAGACTGTCAACATCCAAGCCCTGTGGCAAACGTACCAAG
 113▶ A L K T R T G S L K R A L H N A E C Q K T V T I S K P C G K L T K
 1001 CCCAAACCTCAAGCAGAATCTAAGAAGAAGAAAAAGGAAGGCAAGAAACAGGAGAAGATGCTGGATTAAGATGTCACTGTGGAACATAAAAAAGGACA
 147▶ P K P Q A E S K K K K K E G K K Q E K M L D •

MscI (1112)
BalI (1112)
NheI (1106)

1101 TCAGCAGCTAGTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTG

HpaI (1244) **MfeI (1255)**

1201 ATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAACAAGTTAAACAACAATTGCATTCTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGA

EcoRI (1340)

1301 GGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATCTAAATACAGCATAGCAAACCTTAACCTCAAATCAAGCCTCTACTTGAATCC
 1401 TTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTCATGGAGTTTAAAGATATAGT

SspI (1579) **Swal (1593)**

1501 TATTTTCCAAGTTTGAAGTCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAAATATTCAGAAATAATTTAAA

EcoO109I (1654)

1601 TACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCCAGTTTAGTAGTTGGACTTAGGGAAC
 1701 AAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTTCTCAATGGTGGTTTTGAC
 141▶ • N R T Y K L P I L E E I T T K V

SacI (1854) **BstXI (1883)**

1801 CAGCTTGCCATTCTCAATGAGCACAAGCAGTCCAGGAGCATAGTCCAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTG
 124▶ L K G 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
 1901 TCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTCTGCCCGTTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGA
 90▶ D V E 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

StuI (2018)
Eco147I (2018)

2001 CAGTGACCCTGCCAATGTAGGCCCTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTGCTTGTGCTCATA
 57▶ T V R 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

BspHI (2168)

2101 GAGCATGGTATCTTCTCAGTGGCGACCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGATGGCCCTCCTATAGTGAAGTCTGATTA
 24▶ L M T I K E T A V E V L E L D Q Q S I N F T K M

VspI (2226)
AseI (2226)
SacI (2283)

2201 TACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAG

SpeI (2381)

2301 ACCTCCCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTC

2400 CCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTA CTGCTGCCCCAACCGCATCATCATGGTAATAG

SnaBI (2509)
Eco105I (2509)

2500 CGATGACTAATACGTAGATGTA CTGCTGCCCCAACCGCATCATCATGGTAATAG

NdeI (2614)

2600 AGGGGGCGTACTTGGCATATGATACACTTGATGTA CTGCTGCCCCAACCGCATCATCATGGTAATAG

PstI (2793)
SdaI (2792)

2700 GTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGACCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCA

PacI (2800) **BspLU11I (2810)**

2799 GGTTAA TTAAGAACATGTGAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACG

2898 AGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGGCTCTCC

2998 TGTCCGACCTGCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTG

ApaLI (3124)

3098 TAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAA

3198 GACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTA

3298 CGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACC

3398 GCTGGTAGCGGTGGTTTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTC

EagI (3560)

PacI (3540) **Swal (3549)** **NotI (3559)**

3498 AGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGCCGCAATAAAATATCTTTATTTTCATTACATCTG

3598 TGTGTTGGTTTTTGTGTGAATCGTAACATAACGCTCTCCATCAAAAACAAAACGAAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTG

3698 CAGGTGCCAGAACATTTCTCTATCGAA