



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

1 GGATCTGGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGCGGGTAAACTGGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC

301 GCCATCCACGCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

XcmI (560) **NcoI (560)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGGCTACTCTGAGATCACCGGTCCACATGGGCAGTCTGGTATTGAGGAGACCTTTCTGCCATCT

1▶ M G S L V F R R P F C H L

Eco47III (636) **AfeI (636)**

601 CTCCACCTACAGCCTGATTTGGGCATGGCAGCAGTACGCTGAGCAGCTCAAGTGGAAAGTGGTGACCCAGGATGAAAGAAAGCGCTGCACACAAC

13▶ S T Y S L I W G M A A V A L S T A Q V E V V T Q D E R K A L H T T

701 GCATCCTTACGATGTTCTCTAAAGACATCCAGGAACCTTGATTGTGACATGGCAGAAAAAGAAAGCCGTGAGCCAGAAAAACATGGTACCTACAGCA

47▶ A S L R C S L K T S Q E P L I V T W Q K K K A V S P E N M V T Y S

801 AAACCCATGGGGTTGTAATCCAGCCTGCCTACAAGACAGGATAAATGTCACAGAGCTGGGACTCTGGAAGTCAAGCATCACCTTCTGGAACACAACATT

80▶ K T H G V V I Q P A Y K D R I N V T E L G L W N S S I T F W N T T L

BspLU11I (917)
BsrGI (981)

901 GGAAGATGAGGGTGTCTACATGTGTCTTTCAACACGTTTGGTTCTCAGAAGGTCTCAGGAACAGCTTGCCCTTACCCTCTATGTACAGCCATAGTACAC

113▶ E D E G C Y M C L F N T F G S Q K V S G T A C L T L Y V Q P I V H

1001 CTTCACTACAACATTTTTGAAGACCACCTAAACATCACTTGTCTGCGACTGCCGTCAGCCCTGCCATCTCTGGAAGGGTACTGGGACAGGAATTG

147▶ L H Y N Y F E D H L N I T C S A T A R P A P A I S W K G T G T G I

BstXI (1122)

1101 AGAATAGTACCGAGAGTCACTTCCATTCAAATGGGACTACATCTGTCCAGCAGATCCTCCGGTCAAAGACCCAAAACCTCAAGTTGGGAAGGAAGTGTAT

180▶ E N S T E S H F H S N G T T S V T S I L R V K D P K T Q V G K E V I

1201 CTGCCAGGTTTTATACCTGGGGAATGTGATTGACTACAAGCAGAGCTGGACAAAGGATTTTGGTTTTCAGTTCCACTGTTGTAAGCATTGTTCTCTG

213▶ C Q V L Y L G N V I D Y K Q S L D K G F W F S V P L L L S I V S L

BsaBI (1317) **BsrBI (1357)**

1301 GTAATCTTCTGGTCTTGTATCTCCATCTTACTATACTGAAACGTCACCGAAATCAGGAGCGGGGTGAATCATCACAGGGGATGCAAAGAATGAAATAAG

247▶ V I L L V L I S I L L Y W K R H R N Q E R G E S S Q G M Q R M K •

MscI (1450)

1401 AGCTCTAGAGAAATTATACAGAACCCTGAACGTGTTTCCCTGGTGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAG

HpaI (1582) **MfeI (1593)**

1501 AATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAAACAACATTGC

EcoRI (1678)

1601 ATTCATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAATGTGGTATGGAATTTAAAATACAGCATAGC

1701 AAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTT

1801 GCAGCCTCACCTTCTTTCATGGAGTTTAAAGATAGTGTATTTTCCCAAGGTTTGAAGTACTGCTTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCA

SspI (1917) **SwaI (1931)**
EcoO109I (1992)

1901 CATTCCCTTTTTAGTAAAATATTAGAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTT

2001 CATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTCTGGTG

2101 TACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTC

136▶ 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 E R

2201 TGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTT

103▶ 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 N

StuI (2356)

2301 GCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGACAGCAGAGATGATCTCCCAAGTCTTGGTC

70▶ 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 T

XmnI (2498)

2401 CTGATGGCCGCCCGACATGGTCTTGTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGA

36▶ 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 N F

2501 **BspHI (2506)** AGGTCTTCATGATGGCCCTCCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGC
3 T K M
2601 T TATCTGACGGTTCACATAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTT

2701 **SpeI (2719)** TGGAAAGTCCCGTTGATTTACTAGTCAAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCC

2800 **SnaBI (2847)** ATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGCA

2900 **NdeI (2952)** TAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGTACTGCCAAGTGGGCAGTTTACCGTAAAT

3000 ACTCCACCCATTGACGTCAATGGAAAGTCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGGGGGGTCTTGGGCGGTCAGCC

3100 **PstI (3131)** AGGCGGGCCATTTACCGTAAGTTATGTAACGCTG CAG G TT AA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCG
SdaI (3130) **PacI (3138)** **BspLU11I (3148)**
3198 GTTGCTGGCGTTTTTCCATAGGCTCCGCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATA
3298 CAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCG

3398 **ApaLI (3462)** TTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGGC
3498 CTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTA
3598 GCGGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAA
3698 AAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCA

3798 **PacI (3878)** **SwaI (3887)** AGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC A

EagI (3898)
NotI (3897)
3898 GCGGCCGCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACA
3998 AAACAACTAGCAAATAGGCTGTCCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA