



PvuI (7)
SgfI (6) 1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA **MfeI (82)**
101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) 201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC **Bsu36I (291)**
301 GCCATCCACGCGGTTGAGTGCCTGTTGCGCCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

KasI (535) 501 TCTGTTCTGCGCGGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTCATCATGACAGATCAGACCTATTGTGACCGCCTGGTGCAGGA **AgeI (552)**
BspHI (560) 1▶ M T D Q T Y C D R L V Q D

NcoI (618) 601 CACGCCTTTCCTGACAGGCCATGGGCGCTTGTAGTGGAGCAGAGTGGACAGGATCATCTCCAGCTGAACCGTTACTACCCACAGATCCTTACCAACAAG **PvuII (661)**
13▶ T P F L T G H G R L S E Q Q V D R I I L Q L N R Y Y P Q I L T N K

BspEI (713) 701 GAGGCGGAAAAGTTCCGGAAACCCCAAGGCATCCTTGCCTGTGCGGCTCTGTGACCTCCTGAGCCACCTGCAGCGGAGCGGTGAGCGGGACTGCCAGGAGT **BspI (713)**
47▶ E A E K F R N P K A S L R V R L C D L L S H L Q R S G E R D C Q E
801 TCTACCGAGCCCTGTATATCCATGCCAGCCCTGCACAGCCCTGCCAGCCGACGCTCTGCAGAACTCAGATTGCACAGAGCTAGACTCGGGCAG **BspI (713)**
80▶ F Y R A L Y I H A Q P L H S R L P S R H A L Q N S D C T E L D S G S

XcmI (929) 901 CCAGAGCGGCGAGCTGAGTAACAGGGGACCCATGAGCTTCTGGCTGGCTGGGCGTTGCTGTGGACTGGCCCTGCTCCTGTACTGTATCCGCCAGAC **SandI (924)**
113▶ Q S G E L S N R G P M S F L A G L G L A V G L A L L L Y C Y P P D

SandI (1015) 1001 CCCAAGGGCCTGCCAGGGACCCGCGCTCCTCGGTTTCTCGCCTGTATCATCGACAGATGTGACCGCTACCTGCTGGCCTTCTGGCAGATGACC **BspLU11I (1059)** **AvrII (1098)**
147▶ P K G L P G T R R V L G F S P V I I D R H V S R Y L L A F L A D D

MscI (1157) 1101 TAGGGGGCTCTGACAGACCCTGGACCCAGGGCCTCACCTGCCACTCAACCGTAGTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCA **NheI (1151)**
180▶ L G G L •

HpaI (1289) 1201 CAACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACA

MfeI (1300) 1301 CAATTGCATTCATTTTATGTTTCAGGTTACAGGGGAGGTGTGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGGTATGGAATCTAAATACA **EcoRI (1385)**
1401 GCATAGCAAAACTTTAACCTCCAATCAAGCCTCTACTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGCTGTTGCCAATGTGCATTA
1501 GCTGTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTCCCAAGTTTGAAGTCTCTTCTTCTTTATGTTTAAATGCACTGA

SspI (1624) 1601 CCTCCACATTCCCTTTTGTAGAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAA **Swal (1638)**
1701 GGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTT **SacI (1899)**
139▶ 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 I

BstXI (1928) 1901 AGCTCTCTGCACATGCCACAGGGGCTGACCACTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCT **StuI (2063)**
105▶ 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 K Q
2001 GCCCCTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCCAGT **StuI (2063)**
72▶ 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 T
2101 CTTGGTCTGATGGCCGCCACATGGTGTCTTGTCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAG **StuI (2063)**
39▶ 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 S

BspHI (2213) 2201 ATGTTGAAAGTCTTCATGATGGCCCTCCTATAGTGAAGTCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGT **BbsI (2209)** **AseI (2271)**
5▶ I N F T K M

SacI (2328) 2301 CTCCAGCTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTAC

SpeI (2426) 2401 GACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCCATTTGACGTCAATGGGGTGGAGACTTGGAAATCCCGTGGAGTCAAACCGCTATC

2500 CACGCCCATTTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAAGTCATGTA

SnaBI (2554)

2600 CTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTAC

NdeI (2659)

2700 CGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGGTCGTTGGGCG

2800 GTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAA

SdaI (2837)

PacI (2845)

BspLU11I (2855)

2898 AGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATA

2998 AAGATAACAGGCGTTTTCCCTGGAAAGCTCCCTCGTGGCTCTCTGTTCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGC

3098 GTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACC

ApaLI (3169)

3198 GCTGCGCCTTATCCGTTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAG

3298 GTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACC

3398 TTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAG

3498 GATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATT

PacI (3585)

SwaI (3594)

EagI (3605)

NotI (3604)

3598 TAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAA

3698 CGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA