



100

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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTGCAGTTCGCCGCTCCCGCCTGTGGTGCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTGGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

AgeI (552)

501 TCTGTTTGTCCGGCTTACAGATCCAAGCTGTGACCGGCGCCTACCTGAGATCACCGGTAGGAGGGCCAACATGTTCATGTTTCTTTTAGATATATCTT
1 M F H V S F R Y I F

NdeI (677) **BsaBI (696)**

601 TGGAAATCCTCCACTGATCCTTGTCTGCTGCCTGTCACATCATCTGAGTGCCACATTAAGACAAAGAAGGTAAGCATATGAGAGTGTACTGATGATC
 10▶ G I P P L I L V L L P V T S S E C H I K D K E G K A Y E S V L M I

ClaI (703)

701 AGCATCGATGAATTGGACAAAATGACAGGAAGTATAGTAATTGCCCGAATAATGAACAAAATTTTTAGAAAACATGTATGTGATGATACAAAGGAAG
 44▶ S I D E L D K M T G T D S N C P N N E P N F F R K H V C D D T K E
 801 CTGCTTTTCTAAATCGTGTCTCGCAAGTTGAAGCAATTTCTTAAAAATGAATATCAGTGAAGAATTCATGTCCACTTACTAACAGTATCACAAGGCAC
 77▶ A A F L N R A A R K L K Q F L K M N I S E E F N V H L L T V S Q G T

NsiI (962)

901 ACAAACACTGGTGAAGTGCACAAGTAAGGAAGAAAAAACGTAAGGAACAGAAAAAAGATGATGCATGTTTCTTAAAGAGACTACTGAGAGAAAAATAAA
 110▶ Q T L V N C T S K E E K N V K E Q K K N D A C F L K R L L R E I K

XcmI (1058) **NheI (1074)** **MscI (1080)**

1001 ACTTGTGGAATAAAATTTGAAGGCGAGTATATAAACAGGACATGTAGCAACAACCTCAAGAATCTACTGGTCTAGTGTGCCAGACATGATAAGATA
 144▶ T C W N K I L K G S I •

1101 CATTGATGAGTTTGGACAAACCACAAGTGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGC

HpaI (1212) **MfeI (1223)**

1201 TGCAATAAACAAGTTAACACAACAATTGCATTATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAAT
 1301 GTGGTATGGAATTCTAAATAACAGCATAGCAAACTTTAACTCCAATCAAGCCTTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCA

SapI (1490)

1401 GGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTCTTCATT

SspI (1547) **SwaI (1561)**

1501 TCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTA

EcoO109I (1622)

1601 TTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGGAACCTTTAATAGAAATTGGACAGCAAG
 1701 AAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGC
 141▶ • 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

SacI (1822) **BstXI (1851)**

1801 AGTCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGC
 113▶ 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 D S Y P H R V A

StuI (1986)

1901 CACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGG
 80▶ 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 G I Y A E I H
 2001 ACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCGACATGGTGTGTTGTCCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCA
 46▶ 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 I K E T A V E V

BspHI (2136)

BbsI (2132)

XmnI (2128)

AseI (2194)

2101 CCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGTGATTATACTATGCCGATATACTATGCCGATGATTAAT
 13▶ L E L D Q Q S I N F T K M

SacI (2251)

2201 TGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCATAACAGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATT

SpeI (2349)

2300 GCGTCAATGGGGCGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGAA

SnaBI (2477)

2399 ATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGT

NdeI (2582)

2499 AGGAAAAGTCCATAAAGTTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGA
2599 TGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACG

PstI (2761)

SdaI (2760)PacI (2768)

2699 TCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCC T G 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
2797 AGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAAATCGACGCTCAAGTCAGAG
2897 GTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTG

ApaLI (3092)

2997 TCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGC
3097 ACGAACCCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCAC
3197 TGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGTACACTAGAAGAACAGTATTTGGTATC
3297 TCGGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGC
3397 AGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACTCACGTTAAGGGATTTT

EagI (3528)

PacI (3508) SmaI (3517) NotI (3527)

3497 GGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTGTGTAATCGTAACTAA
3597 CATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA