



PvuI (7)
SgfI (6) MfeI (82) EcoNI (96)
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) HindIII (245) **Bsu36I (291)**
PvuII (239) EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTGCTCCGCTCCCGCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

BspHI (560)
AgeI (552) BstXI (581)
501 TCTGTTTGGCGCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTCATCATGAACAGGAAGTGCACAGCCATAGCCCTGGCTGCGAT
1▶ M N R K V T A I A L A A I

PvuII (611) **XmaI (664)**
601 CATCTGGGCCACAGCTGCTCAAGGCTTCTTTATGTTCAAACAGGGCGCTGTCTTTGCATCGGCCCGGGATGAAAGCGTCAAATGGCAGAGATCGAG
13▶ I W A T A A Q G F L M F K Q G R C L C I G P G M K A V K M A E I E

HindIII (701)
701 AAAGCTTCTGTAATTTACCCGAGTAACGGCTGCGACAAAGTTGAAGTGATTGTTACTATGAAGGCTCATAAACGACAAAGGTGCCTGGACCCAGATCCA
47▶ K A S V I Y P S N G C D K V E V I V T M K A H K R Q R C L D P R S

BspLU11I (857) **NheI (877)** **MscI (883)**
801 AGCAAGCTCGCCTCATAATGCAGGCAATAGAAAAAAGAATTTTTAAGGCGTCAAAACATGTGACATCCTGGGAACGCTAGTGCCAGACATGATAAG
80▶ K Q A R L I M Q A I E K K N F L R R Q N M •

901 ATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAATTTGTGATGCTATTGCTTTATTTGTAACCATTATA

HpaI (1015) MfeI (1026)
1001 AGCTGCAATAAAACAAGTTAAACAACAACATTGCATTCATTTTATGTTTCAGGTTCAAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACA

EcoRI (1111)
1101 AATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCA

SapI (1293)
1201 TCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCATGGAGTTTAAGATATAGTGATTTTCCAAGGTTTGAAGTACTAGCTCTTC

SspI (1350) **SwaI (1364)**
1301 ATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTT

EcoO109I (1425)
1401 TTATTAGGCAGAATCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATGGACAGC

1501 AAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAA
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

SacI (1625) **BstXI (1654)**
1601 AGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCGACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGAC
114▶ C 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

StuI (1789)
1701 AGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGCCTGCCAATGTAGGCCTCAATG
81▶ A 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
1801 TGGACAGCAGAGATGATCTCCCACTTGGTCTGATGGCCGCCGACATGGTGTGTTGCTCCTCATAGAGCATGGTGTCTCTCAGTGGCGACCT
47▶ H 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

BbsI (1935) **XmnI (1931)** **AseI (1997)**
1901 CCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCTCTATAGTGAGTCTATTATACTATGCCGATATACTATGCCGATGATT
14▶ V L E L D Q Q S I N F T K M

SacI (2054)
2001 AATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACATAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCCAT

SpeI (2152)
2101 TTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAA

SnaBI (2280)
2201 AATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGTACTAATACGTAGATGTAAGTCCAAAG

NdeI (2385)
2301 TAGGAAAGTCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGCCATTTACCGTATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTG

2401 ATGTAAGTCCAAAGTGGGAGTTTACCGTAAATACTCCACCATTTGACGTCAATGGAAAGTCCCTATTGGCGTACTATGGGAACATACGTATTATTGAC

PacI (2571)
PstI (2564)
SdaI (2563) BspLU11I (2581)

2501 GTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCA
 2601 GCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGG
 2701 TGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTGCCGCTTACCGGATACCTGT
 2801 CCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTCCGCTCCAAGCTGGGCTGTGTGCA
 2901 CGAACCCCGCTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACT
 3001 GGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCT
 3101 GCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGTTTTTTGTTTGAAGCA
 3201 GCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACCTCACGTTAAGGGATTTG
 3301 **EagI (3331)**
 PacI (3311) SwaI (3320) **NotI (3330)**
 GTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGTTTTTGTGTGAATCGTAACTAAC
 3401 ATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCCAGTGCAAGTGCAAGTGCCAGAACATTTCTCTATCGAA