



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAAGTGGCGGGGTAAGTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NaeI (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

KasI (535)
SphI (560) **XmnI (573)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTGAGCATGCCGTCCGAGAACCTTCAAGCAGCGCCGGAGCTT
1▶ M P S E K T F K Q R R S F

601 TGAACAAAGAGTGGAAAGTGTCCGGTCCATCCGGGAGCAGCACCCACCAAGATCCCAGTGATTATAGAGCGATACAAGGGGAGAAGCAGCTGCCCGTC
 13▶ E Q R V E D V R L I R E Q H P T K I P V I I E R Y K G E K Q L P V

BstXI (710) **BbrPI (730)**
PvuII (688)

701 CTGGACAAGACCAAGTTCCTGGTGCCTGACCACGTGAACATGAGCGAGCTCATCAAGATAATCAGACGGCGCTTGACGCTCAATGCTAACCAAGCCTTCT
 47▶ L D K T K F L V P D H V N M S E L I K I I R R R L Q L N A N Q A F

BsrGI (887)

801 TCCTCCTGGTGAATGGGCACAGCATGGTGAAGTGTGCCACTCCCATCTCCGAAGTGTACGAGAGTGAAGACGGCTTCTGTACATGGTTTA
 80▶ F L L V N G H S M V S V S T P I S E V Y E S E R D E D G F L Y M V Y

NheI (959)
XcmI (953) **MscI (965)**

901 TGCCTCGCAGGAGACATTCGGGACAGCAATGGCTGTGAAGACTCCAACAAAGCCAATGGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGG
 113▶ A S Q E T F G T A M A V •

HpaI (1097)

1001 ACAAACCAACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTT

MfeI (1108)
EcoRI (1193)

1101 AACAACAACAAATGCATTTCATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCT
 1201 AAAATACAGCATAGCAAACTTTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAAT
 1301 GTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGTATTTTCCCAAGTTTGAAGTAGCTCTTCATTTCTTTATGTTTTAAA

SspI (1432) **SwaI (1446)**

1401 TGCACTGACCTCCACATTCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAG

EcoO109I (1507)

1501 ATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAG
 1601 CTTAGTTCCTGGTACTTGGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGT
 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 D P A Y D

BstXI (1736)

1701 CAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAA
 108▶ 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 V I T D F

StuI (1871)

1801 GTCCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCCAGCACAGCAGTGCACCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATC
 75▶ 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 V A S I I

1901 TCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTCTTGTGTCCTATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCT
 41▶ 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 L E L D Q

XmnI (2013)
AseI (2079)

2001 GCTGAGAGATGTTGAAGTCTTTCATGATGGCCCTCTATAGTGAAGTCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTG
 8▶ Q S I N F T K M

2101 GATGGCGTCTCCAGCTTATCTGACGGTTCACATAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGG

SpeI (2234)

2200 AGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCGTGAGTCAA

SnaBI (2362)

2299 ACCGCTATCCACGCCATTGATGTAAGTCCGCAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTCCGCAAGTAGGAAAGTCCCATAA

NdeI (2467)

2399 GGTCATGTAAGTGGCATAATGCCAGGGGCCATTTACCGTCAATGAGCTCAATAGGGGGCGTACTTGGCATATGATACACTTGTACTGCAAGTGG

2499 GCAGTTTACCGTAAATACTCCACCCATTGACGTC AATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTC AATGGGCGGGGT

PstI (2646)

SdaI (2645) PacI (2653) BspLU11I (2663)

2599 CGTTGGGCGGTCAGCCAGGCGGGCCATTACCGTAAGTTATGTAACGCC TGCAG GTT AA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGA

2697 ACCGTAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGAC

2797 AGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCGACCTGCCGCTTACCGGATACCTGTCCGCCTTCTCCCT

ApaI (2977)

2897 TCGGGAAGCGTGGCGTTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTCC

2997 AGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAG

3097 CAGAGCGAGGTATGTAGGCGGTCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAG

3197 CCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACACCCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCA

PacI (3393)

3297 GAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTA

EagI (3413)

SwaI (3402) NotI (3412)

3397 ATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTATTACATCTGTGTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCAT

3496 CAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAAGTGCAAGTGCAAGTGCCAGAACATTTCTCTATCGAA