



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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTACTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTCTCAACTCTACGTCTTTGTTTCGTTT

KasI (535)
BstEII (555) **AgeI (552)** **Psp1406I**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTA CCTGAGATCACCGGTACCATGGAAGAAGATGAGTTCATTGGAGAAAAACATTCCA
 601 ACGTTATTGTGAGAATTCATTAACATTACACAACAGATAGGTGATGTTGGGAATGGAGACCATCAAAGGACTGTTCTGATGGCTACATGTGCAAAATA
 13▶ R Y C A E F I K H S Q Q I G D S W E W R P S K D C S D G Y M C K I

BbsI (764)

701 CACTTTCAAATTAAGAATGGGTCTGTGATGTCACATCTAGGAGCACTACCCATGGACAGACATGTCTTCCATGGAGGAGGCTTTCGAGCTACCCCTGG
 47▶ H F Q I K N G S V M S H L G A P T H G Q T C L P M E E A F E L P L

PstI (821)

801 ATGATTGTGAAGTGATTGAACTGCAGCAGCGTCCGAAGTGATTAATATGAGTATCATGTCTTATATTCCTGTAGCTACCAAGTGCCTGTACTTTACTT
 80▶ D D C E V I E T A A A S E V I K Y E Y H V L Y S C S Y Q V P V L Y F

HindIII (906)
NdeI (942)

901 TAGGCAAGCTTTTTAGATGGGAGACCTTAACTCTGAAGGACATATGGGAAGGATTCATGAGTGTCTATAAGATGCGACTGCTACAGGGACCATGGGAC
 113▶ R A S F L D G R P L T L K D I W E G V H E C Y K M R L L Q G P W D
 1001 ACTATTACGCAACAGGAACATCCAATACTTGGGCAACCTTTTTGTACTTCATCCCTGCAAGACGAATGAATTCATGACTCCTGTATTAAGAATTCTC
 147▶ T I T Q Q E H P I L G Q P F F V L H P C K T N E F M T P V L K N S
 1101 AGAAAATCAATAAGAATGTCAACTATATCACATCATGGCTGAGCATTGTAGGGCCAGTGTGGGCTGAATCTACCTCTGAGTTATGCCAAAGCAATGTC
 180▶ Q K I N K N V N Y I T S W L S I V G P V V G L N L P L S Y A K A M S

MscI (1262) **NheI (1256)**

1201 TCAGGATGAACGAAATGTCCATTAACAAGATTCTTCTATTGAGTTAGGAATTGCGGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACA
 213▶ Q D E R N V H •

HpaI (1394)

1301 AACCACACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAC

MfeI (1405)

1401 AACAACAATTGCATTCATTTTATGTTTCAGGTTAGGGGGAGGTGTTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCATAAA
 1501 ATACAGCATAGCAAACTTAACTCCAATCAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGCTGTTGCCAATGTG
 1601 CATTAGCTGTTTGAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTTCCAAGGTTTGAAGTACTCTTCAATTTCTTTATGTTTTAAATGC

SspI (1729)
Swal (1743)

1701 ACTGACCTCCACATTCCCTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATG

EcoO109I (1804)

1801 CTCAAGGCCCTTCATAATATCCCCAGTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTT
 141▶

1901 TAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAG
 140▶ • 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 S

SacI (2004)
BstXI (2033)

2001 AGATGAGCTCTGACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTC
 107▶ 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 D

StuI (2168)

2101 CTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCC
 74▶ 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 E
 2201 CCAGTCTTGGTCTGATGGCCGCCCGACATGGTGCTTGTGCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCT
 40▶ 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 Q

BbsI (2314)
AseI (2376)

2301 GAGAGATGTTGAAGTCTTCATGATGGCCCTCCTATAGTGAGTCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGAT
 7▶ S I N F T K M

SacI (2433)

2401 GGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTGCGTCAATGGGGCGGAGT

SpeI (2531)

2500 TGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGTGGAGACTTGGAAATCCCGTGAGTCAAACC

2599 GCTATCCACGCCATTGATGTA CTGCTGCAAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTA CTGCTGCAAGTAGGAAAGTCCCAT AAGGT
SnaBI (2659)

2699 CATGTA CTGCTGCAAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTA CTGCTGCAAGTAGGAAAGTCCCAT AAGGT
NdeI (2764)

2799 GTTTACCGTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGT TACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGT

2899 TGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACC
PstI (2943)
SdaI (2942)**PacI (2950)**

2997 GTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCAAACCCGACAGG
←

3097 ACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCGGACCCTGCCGTTACCGGATACCTGTCCGCCTTCTCCCTTCG

3197 GGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCCAGC
ApaLI (3274)

3297 CCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAG

3397 AGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCA

3497 GTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTTTGTTGCAAGCAGCAGATTACGCGCAGAA

3597 AAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGCTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATT
PacI (3690)

3697 AACATTTAAATCAGCGGCCCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAA
EagI (3710)
Swal (3699) **NotI (3709)**

3797 ACAAACGAAACAAACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTATCGAA