



PvuI (7) SgfI (6) MfeI (82) EcoNI (96)
 1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) HindIII (245) Bsu36I (291) EcoNI (287)
 201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGCGCCCGCCCTACCTGAGGGCC
 301 GCCATCCACGCGGTTGAGTGCAGTTCGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
 401 GGGCCTTTGTCCGGGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

NcoI (560) BstEII (555) Bsp120I (593) AgeI (552)
 501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACCGGTACCATGGCACAGCACGGGGCGATGGGCGGTTTTCCGGCCCT
 1▶ M A Q H G A M G A F R A L

BssHII (620) XmaI (655) SandI (651)
 601 GTGCGGCTGGCGCTGCTGTGCGCGCTCAGCCTGGGTACGCGCCACCGGGGTCCCGGGTGGCGCCCTGGGCGCTCTGCTTGGGACGGGAACGGAC
 13▶ C G L A L L C A L S L G Q R P T G G P G C G P G R L L L G T G T D

BssHII (700) XmaI (744) EcoRI (793)
 701 GCGCGTGTGCTGCCGGTTTACACGACGCGCTGCTGCCGCGATTACCGGGCGAGGAGTGTGTTCCGAGTGGGACTGCATGTGTGCCAGCCTGAATTC
 47▶ A R C C R V H T T R C C R D Y P G E E C C S E W D C M C V Q P E F

BstAPI (818) SfiI (928)
 801 ACTGCGGAGACCTTGTGCACGACCTGCCGGCACCACCTTGTCCCCAGGCCAGGGGTACAGTCCAGGGGAAATTCAGTTTTGGCTTCCAGTGTAT
 80▶ H C G D P C C T T C R H H P C P P G Q G V Q S Q G K F S F G F Q C I

SandI (1027) PshAI (1059)
 901 CGACTGTGCTCGGGGACCTTCTCCGGGGCCACGAAGCCACTGCAAACCTTGGACAGACTGCACCCAGTTCGGGTTTCTCACTGTGTTCCCTGGGAAC
 113▶ D C A S G T F S G G H E G H C K P W T D C T Q F G F L T V F P G N

SandI (1027) PshAI (1059)
 1001 AAGACCCACAACGCTGTGTGCGTCCCAGGGTCCCGCGCAGAGCCGCTTGGTGGCTGACCGTCTGCTCTCTGCGCGCTGCGCTCCTCCTCC
 147▶ K T H N A V C V P G S P P A E P L G W L T V V L L A V A A C V L L

BbsI (1198) SalI (1191)
 1101 TGACCTCGGCCAGCTTGGACTGCACATCTGGCAGCTGAGGAGTCAAGTGCATGTGGCCCCGAGAGACCCAGCTGCTGCTGGAGGTGCCCGCTGCACCGA
 180▶ L T S A Q L G L H I W Q L R S Q C M W P R E T Q L L L E V P P S T E

BsrBI (1231) SapI (1228) PvuI (1243)
 1201 AGACGCCAGAAGCTGCCAGTTCCTCCGAGGAAAGAGCGGGGCGAGCGATCGGCAGAGGAGAAGGGGCGGCTGGGAGACCTGTGGTGTGAGCCTGGCCGTCC
 213▶ D A R S C Q F P E E E R G E R S A E E K G R L G D L W V •

MscI (1307) NheI (1301)
 1301 TGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCT

HpaI (1439) MfeI (1450)
 1401 ATTGCTTTATTTGTAACCATTATAAGTGAATAAACAAGTTAAACAACAATTGCATTCTTTATGTTTCAGGTTACAGGGGAGGTGGGAGGTTT

EcoRI (1535)
 1501 TTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTC
 1601 TGAGGGATGAATAAGGCATAGGCATCAGGGGCTTGGCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTCATGGAGTTTAAAGATATAGTATTT

SapI (1717) SspI (1774) SmaI (1788)
 1701 TCCCAAGTTTGAAGTACTAGCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTATGATAAAATTCAGAAATAATTTAAATACAT
 1801 CATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGG
 1901 AACCTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCT
 141▶ • N R T Y K L P I L E E I T T K V L K

SacI (2049) BstXI (2078)
 2001 TGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCAC
 122▶ G N M E I L V F 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
 2101 CTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTG
 89▶ E D S Y P H R V 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

StuI (2213)
 2201 ACCCTGCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTTGGTCTGATGGCCGCCCCGACATGGTGTCTTGTCTCATAGAGCA
 55▶ V R G I Y A E I 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

BbsI (2359) XmnI (2355)
 2301 TGGTGATCTTCTCAGTGGCGACCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCCTATAGTGAGTCGTATTATACTA
 22▶ T I K E T A V E V L E L D Q Q S I N F T K M

2401 **AseI (2421)** **SacI (2478)**
TGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTC

2501 **SpeI (2576)**
CCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTG

2601
ACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGA

2701 **SnaBI (2704)**
CTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGGGGCCATTTACCGTCATTGACGTCAATAGGGGG

2801 **NdeI (2809)**
CGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTACT

2901 **PacI (2988)** **PacI (2995)**
SdaI (2987)
ATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTACGCCAGGCGGGCCATTTACCGTAAAGTTATGTAACGCCTGCAGGTTAAT

3001 **BspLU11I (3005)**
TAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC

3101
AAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCCTGGAAGTCCCTCGTGCCTCTCTGTTCCGA

3201
CCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGT

3301 **ApaLI (3319)**
TCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGAC

3401
TTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACA

3501
CTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGTGGTAG

3601
CGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGTCTGACGCTCAGTGGAAC

3701 **EagI (3755)** **PacI (3735)** **SwaI (3744)** **NotI (3754)**
GAAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGG

3801
TTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCC

3901
AGAACATTTCTCTATCGAA