



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

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTCGCGTTCGCCGCTCCCGCCTGTGGTGCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTGGCTGACCCTGTTGCTCAACTCTACGCTTTTGTTCGTTT

KasI (535) **AgeI (552)** **BspHI (560)**
501 TCTGTTCTGCGCGGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTCATCATGAACCACACTTCTCAAGCCTTCATCACCGCTGCCAG
601 TGGAGGACAGCCCCAAACTACGAAAGAATCAAGGAAGAATATGAGGTGGCTGAGATGGGGACCGCACGGATCGGCTTCTGTGAGAACTACTGTGATC
13▶ G G Q P P N Y E R I K E E Y E V A E M G A P H G S A S V R T T V I
1▶ M N H T S Q A F I T A A S

BspHI (761)
701 AACATGCCAGAGAGGTGTCGGTGCTGACCATGTGGTCTGGTCCCTGTTCAATACACTCTTCATGAACCTTCTGCTGCTGGGCTTCATAGCCTATGCCT
47▶ N M P R E V S V P D H V V W S L F N T L F M N F C C L G F I A Y A

StuI (851)
801 ACTCCGTGAAGTCTAGGGATCGGAAGATGGTGGTGATGTGACTGGAGCCAGGCCCTCACTGCTAAGTGCCTGAACATCAGCACCTTGGTCCCT
80▶ Y S V K S R D R K M V G D V T G A Q A Y A S T A K C L N I S T L V L

NheI (95)
901 CAGCATCCTGATGGTTGTTATCACCATTGTTAGTGTATCATCATCTTCTTAACTGCTCAAAACCTTCACACTTAATAGAGGATTCCGACTTCCGGTCCG
113▶ S I L M V V I T I V S V I I I V L N A Q N L H T •

MscI (1004)
1001 TAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAATTTGTGATGCTATT

HpaI (1136) **MfeI (1147)**
1101 GCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAAACAACAACATTGCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTTTTT

EcoRI (1232)
1201 AAAGCAAGTAAACCTCTACAAATGTGGTATGAATTTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGA
1301 GGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTTCC

SapI (1414) **SspI (1471)** **SwaI (1485)**
1401 CAAGGTTTGAAGTCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTATGTAATAATTCAGAAATAATTTAAATACATCAT

EcoO109I (1546)
1501 TGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAAC
1601 CTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGC
141▶ • N R T Y K L P I L E E I T T K V L K G

SacI (1746) **BstXI (1775)**
1701 CATTCACTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTC
121▶ 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 E
1801 ATCAGAGTAGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCAGACAGCTGACC
88▶ 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 V

StuI (1910)
1901 CTGCCAATGATAGGCTCAATGTGGACAGCAGAGATGATCTCCCACTTGGTCTGATGGCCGCCGACATGGTGGCTGTTGTCCTCATAGAGCATGG
54▶ 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 T

BbsI (2056) **XmnI (2052)**
2001 TGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCTATAGTGAAGTCTTACTATGC
21▶ I K E T A V E V L E L D Q Q S I N F T K M

AseI (2118) **SacI (2175)**
2101 CGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCCA

SpeI (2273)
2201 CCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAACTCCCATTTGACG
2301 TCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTA

SnaBI (2401)
2401 ATACGTAGATGTAAGTCCCAAGTAGGAAAGTCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGGCCATTTACCGTCAATTGACGTCAATAGGGGGCGT

NdeI (2506)
2501 ACTTGGCATATGATACACTTGTGTAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTACTATG

PacI (2692)
PstI (2685)
SdaI (2684)

2601 GGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTTGCAGGTTAAATTAA

BspLU11I (2702)

2701 GAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAA

2801 AATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTCCCCCTGGAAGCTCCCTCGTGGCTCTCCTGTTCCGACCC

2901 TGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCG

ApaLI (3016)

3001 CTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTA

3101 TCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTA

3201 GAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACACCCTGGTAGCGG

3301 TGGTTTTTTTGGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAA

EagI (3452)

PacI (3432) SwaI (3441) NotI (3451)

3401 AACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTT

3501 TTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGA

3601 ACATTTCTCTATCGAA