



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

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGTTGAGTCGCGTTCTGCCGCCTCCCGCCTGTGGTGCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTAACTCTACGTCTTTGTTTCGTTT

BstEII (555)
AgeI (552) **NcoI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACCGGTACCATTGGCAGCCGGGAGCATCACCACGCTGCCCGCCTTGGC
1▶ M A A G S I T T L P A L P

FspI (683) **EagI (699)**
601 CGAGGATGGCGGAGCGCGCCTTCCCGCCCGCCACTTCAAGGACCCCAAGCGGCTGTACTGCAAAAACGGGGCTTCTTCCCTGCGCATCCACCCGAC
13▶ E D G G S G A F P P G H F K D P K R L Y C K N G G F F L R I H P D

Tth111I (709) **SapI (723)**
701 GGCCGAGTTGACGGGTCCGGGAGAAGAGCGACCTCACATCAAGCTACAACCTCAAGCAGAAGAGAGAGGAGTTGTGTCTATCAAAGGAGTGTGTGCTA
47▶ G R V D G V R E K S D P H I K L Q L Q A E E R G V V S I K G V C A

BsaBI (878)
801 ACCGTTACTGGCTATGAAGGAAGATGAAGATTACTGGCTTCAAATGTGTTACGGATGAGTGTTCCTTTTTGAACGATTGGAATCTAATAACTACAA
80▶ N R Y L A M K E D G R L L A S K C V T D E C F F F E R L E S N N Y N

AgeI (905) **XcmI (923)** **BamHI (967)**
901 TACTTACGGTCAAGGAAATACACCAGTTGGTATGTGGCACTGAAACGAACTGGGCGATATAAACTGGATCCAAAACAGGACCTGGGCGAAGACTATA
113▶ T Y R S R K Y T S W Y V A L K R T G Q Y K L G S K T G P G Q K A I

MscI (1068) **NheI (1062)**
1001 CTTTTCTTCCAATGTCTGCTAAGAGCTGATTTTAATGGCCACATCTAATCTCATTTCACATGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTT
147▶ L F L P M S A K S •

MscI (1036)
1101 TGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAA

HpaI (1200) **MfeI (1211)** **EcoRI (1296)**
1201 GTTAAACAACAATTGCATTCTTTATGTTTCAGGTTCAAGGGAGGTTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAATGTGGTATGGAAT
1301 TCTAAATACAGCATAGCAAACTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCC

SapI (1478)
1401 AATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTAAGATATAGTGATTTTCCCAAGTTTGAACCTAGCTCTTCATTCTTTATGTTTT

SspI (1535) **Swal (1549)**
1501 AAATGCACCTGACCTCCACATTCCTTTTATAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAAATAATGTTTTTATTAGGCAGAATC
1601 CAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTC

SacI (1810) **BstXI (1839)**
1701 TAGCTTTAGTTCCTGGTGTACTTGGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTTCATCTCAATGAGCACAAAGCAGTCAGGAGCAT
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
1801 AGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTG
109▶ 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 A V I T D

StuI (1974)
1901 AAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCCAGCACAGACAGTACCCTGCAATGTAGGCCCTCAATGTGGACAGCAGAGATG
76▶ 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 H V A S I
2001 ATCTCCAGTCTTGGTCTGATGGCGCCCGACATGGTCTTGTTCCTCATAGAGCATGGTGTCTCTCAGTGGCGACCTCCACCAGCTCCAGAT
42▶ 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 V L E L D

BbsI (2120) **XmnI (2116)** **AseI (2182)**
2101 CCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAAATTGTCAAACAGC
9▶ Q Q S I N F T K M

SacI (2239)
2201 GTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCCTACACGCTACCGCCATTTGCGTCAATGGGGC

SpeI (2337)
2301 GGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCGTGGAGTCA

SnaBI (2465)
2401 AACCGCTATCCACGCCATTGATGTAAGTCCAAACCGCATCATCATGTAATAGCGATGACTAATACGTAGATGTAAGTCCAAAGTAGGAAAGTCCATA

2501 AGGTCATG TACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATG TACTGCCAAGTG
 2601 GGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGG

2701 TC GTTGGGCGGT CAGCCAGGCGGGCCATTTACCGTAA GTTATGTAACGCCTGCAGGTTAA TTAAGA ACATGTGAGCAA AAGGCCAGCAA AAGGCCAGGAA
 2801 CCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATC AAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA
 2901 GGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGCCTTTCTCCCTT

3001 CGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCA
 3101 GCCC GACCCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGC
 3201 AGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGC
 3301 CAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGGCGCAG

3401 AAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAA ACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAA

3501 TTAACATTTAAATC AGCGGCGCAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCA
 3601 AAACAAACGAAACAAACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAAGTGCCAGAACATTTCTCTATCGAA

NdeI (2570)

PacI (2756)

PstI (2749)

SdaI (2748)

BspLU11I (2766)

ApaLI (3080)

PacI (3496)

EagI (3516)

SwaI (3505)

NotI (3515)