



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) **PvuII (239)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGACAGACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **AgeI (552)** **BspLU11I (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCAACATGTGCGAAGATTGAGAGTTGTGCTGCAGTCCCTC
1 M S E D S E V V L Q L P S

NgoMIV (613)
NaeI (613)
601 GGCTCCTGTAGGAGCCGGCGGCGAGAGCCTTCCAGAGCTCTCCCGAAACAGCCACCCAGAGCCCCGTCCTCGGCTGCAGTTTCGCCCGAACGGAG
13▶ A P V G A G G E S L P E L S P E T A T P E P P S S A A V S P G T E
701 GAACCTCCCGGAGACACCAAGAAAAAATTGACATCCTGCTGAAGGCTGTAGGAGACTCCTATAATGAAAACAAAGAAATGGGCTGTGGAGCGAACCC
47▶ E P P G D T K K K I D I L L K A V G D T P I M K T K K W A V E R T
801 GGACCATCCAAGGACTCATTGACTTCATCAAAAAGTTCCTTAACTGGTGGCCTCGAACAGTTGTTTATTTATGTGAATCAGTCCTTGGCCCTTCC
80▶ R T I Q G L I D F I K K F L K L V A S E Q L F I Y V N Q S F A P S P

BstXI (903)
901 AGACCAAGAAGTTGGAACCTATATGAGTGTGTTGGCAGTGATGGTAACTGGTCTGCATTACTGCAATCCAGGCATGGGATGAGCCAGAAATGAA
113▶ D Q E V G T L Y E C F G S D G K L V L H Y C K S Q A W G •

MscI (1014)
NheI (1008)
1001 CAACTTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAAGTGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTG

HpaI (1146) **MfeI (1157)**
1101 TGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACCAAGTTAACCAACAATTGCATTCAATTTTATGTTTCAGGTTTCAGGGGAGGTGTGG

EcoRI (1242)
1201 GAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCATAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAAT
1301 CCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTGCAATGTGCATTAGCTGTTTGACGCCTCACCTTCTTTCATGGAGTTAAGATATAG

SspI (1481) **SwaI (1495)**
1401 TGTATTTTCCAAGGTTTGAAGTACTCTTCTTCTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAATATTAGAAAATATTGAAATTTA

EcoO109I (1556)
1501 AATACATCATTGCAATGAAAATAAATGTTTTTATTAGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGA
1601 ACAAGGAACCTTAAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTG
141▶ • N R T Y K L P I L E E I T T K

BstXI (1785)
1701 ACCAGCTTGCCATTCACTCAATGAGCACAAGCAGTCAAGGAGCATAGTCAGAGATGAGTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATC
124▶ V L K 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
1801 TGCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCAGCAGACCCAATGGCAATGGCTTCAGCACA
91▶ D V 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

StuI (1920)
1901 GACAGTGACCCTGCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCCGACATGGTGTCTGTTGCTCTCA
58▶ V T 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

BspHI (2070)
BbsI (2066)
XmnI (2062)
2001 TAGAGCATGGTATCTTCTCAGTGGCGACTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTTCATGATGGCCCTCTATAGTGAGTCGTAT
24▶ Y L M T I K E T A V E V L E L D Q Q S I N F T K M

AseI (2128)
2101 TATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATAT

SpeI (2283)
2201 AGACCTCCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAAC
2300 TCCCATTGACGCTCAATGGGGTGGAGACTTGAAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACGCATCATCATGGTAAT

SnaBI (2411)
2400 AGCGATGACTAATACGTAGATGTAAGTGGCAAGTAGGAAAGTCCATAAGGTGATGTAAGTGGGCATAATGCCAGGCGGGCCATTTACCGTCAATGACGTCA

NdeI (2516)

2500 ATAGGGGGCGTACTTGGCATATGATACACTTGATGTA CTGCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTG

SdaI (2694)

2600 GCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGT CAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGC

PacI (2702)

BspLU11I (2712)

2700 **AGGTTAA** TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGAC

2799 GAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTC

2899 CTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGT

ApaLI (3026)

2999 GTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTT CAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTA

3099 AGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACT

3199 ACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCAC

3299 CGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCT

EagI (3462)

PacI (3442)

SwaI (3451)

NotI (3461)

3399 CAGTGAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCT

3499 GTGTGTTGGTTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGT

3599 GCAGGTGCCAGAACATTTCTCTATCGAA