



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAAGTGGCGCGGGTAAACTGGAAAAGTATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
PvuII (239)
Bsu36I (291)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACGCGCCGCCCTACCTGAGGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGCTTTGTTTCGTTT

AgeI (552)
NcoI (560)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCGCTACCTGAGATCACCGGTACCATGGCCCACTGAAGATGCTGGCCCTGGTACCCTCCT
1▶ M A P L K M L A L V T L L

PstI (613)
XhoI (632)
ScaI (668)
601 CCTGGGGCTTCTGTCAGCACATCCACGCAGCTCGAGGGACCAATGTGGCCGGGAGTGCTGCTGGAGTACTTCAAGGGAGCCATCCCTTAGAAAG
13▶ L G A S L Q H I H A A R G T N V G R E C C L E Y F K G A I P L R K
▶

BbsI (702)
Acc65I (710)
701 CTGAAGACGTGGTACCAGACATCTGAGGACTGCTCCAGGGATGCCATCGTTTTGTAAGTGTGACGGGAGGCCATCTGTTCCGACCCCAACAACAAGA
47▶ L K T W Y Q T S E D C S R D A I V F V T V Q G R A I C S D P N N K

XmaI (877)
NheI (890)
MscI (896)
801 GAGTGAAGAATGCAGTTAAATACCTGCAAAGCCTTGAGAGGTCTTGAAGCCTCCTCACCCAGACTCCTGACTGTCTCCGGGACTACCTGCTAGCTGGC
80▶ R V K N A V K Y L Q S L E R S •
901 CAGACATGATAAGATACATTGATGAGTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATT

HpaI (1028)
MfeI (1039)
1001 TGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAACATTGCATTATTTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGTTTTTTAAAGCAAG

EcoRI (1124)
1101 TAAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAA
1201 TAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGTTT

SapI (1306)
SspI (1363)
Swal (1377)
1301 GAACTAGCTCTTCATTTCTTTATGTTTTAAATGCAGTACCTCCACATTCCCTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGA

EcoO109I (1438)
1401 AAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATA
1501 GAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTATC
141▶ • N R T Y K L P I L E E I T T K V L K G N M

SacI (1638)
BstXI (1667)
1601 TCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGT
118▶ 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 D S Y
1701 AGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTTCAGCACAGACAGTACCCTGCCAAT
85▶ 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 R G I

StuI (1802)
1801 GTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGTCTGGTCTGATGGCCGCCCGACATGGTGTGTTGTCTCATAGAGCATGGTGTATCTTC
52▶ 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 I K

BbsI (1948)
XmnI (1944)
1901 TCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCTCTATAGTGAAGTCTATTATACTATGCCGATATAC
18▶ E T A V E V L E L D Q Q S I N F T K M

AseI (2010)
SacI (2067)
2001 TATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACAC

SpeI (2165)
2101 GCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATGACGTCAATGGG

SnaBI (2293)
2201 GTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAG

NdeI (2398)

2301 ATGTACTGCCAAGTAGGAAAGTCCATAAAGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCA

2401 TATGATACTTGTATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATA

PacI (2584)

PstI (2577)

SdaI (2576)

BspLU11I (2594)

2501 CGTCATTATTGACGTCAATGGGCGGGGGTCTGTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAAGTTATGTAACGCTGCAGGTTAATTAAGAACATGT

2601 GAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCTGACGAGCATCACAAAAATCGACG

2701 CTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCTGCCGCTT

2801 ACCGGATACCTGTCCGCTTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCCGGTGTAGGTGCTTCGCTCCAAGC

ApaLI (2908)

2901 TGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACT

3001 GGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACA

3101 GTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGATTGGTAGCTTTGATCCGGCAAACAACACCGCTGGTAGCGGTGGTTTTT

3201 TTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACTCACG

EagI (3344)

PacI (3324) SwaI (3333) **NotI (3343)**

3301 TTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGTTTTTGTGTG

3401 AATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTCT

3501 CTATCGAA