



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

Psp1406I (203)
HindIII (245)
Bsu36I (291)
PvuII (239)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTCACGCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTCCTGACCCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT

BstEII (555)
AgeI (552) **NcoI (560)** **SapI (585)**
501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTCACCATGGCTGCGGTGGCAAGCGTCTGCTCTTCCTTGCTTT
1▶ M A C G G K R L L F L A L

PstI (624)
601 GGCATGGTACTGCTGGCTCACCTCTGCAGCCAGGCAAGCAAGCAACTACGACTGTTGCCTCTCGTACATACAGAGCGCTCTTCCTCCAGAGCT
13▶ A W V L L A H L C S Q A E A A S N Y D C C L S Y I Q T P L P S R A
HindIII (731)
AseI (742)
701 ATTGTGGGTTTACAAGACAGATGGCCGATGAAGCTTGTGACATTAATGCTATCATCTTTCACACGAAGAAAAGAAAATCTGTGTGCCTGATCCAAAGC
47▶ I V G F T R Q M A D E A C D I N A I I F H T K K R K S V C A D P K

MscI (894)
801 AGAACTGGGTGAAAAGGGCTGTGAACCTCCTCAGCCTAAGAGTCAAGAAGATGTAAAAAACTGATGCTTTTTGGGATGGAATTGGACCTAGCTGGCCA
80▶ Q N W V K R A V N L L S L R V K K M •
901 GACATGATAAGATACATTGATGAGTTTGACAAACCACAAC TAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTG

HpaI (1026)
MfeI (1037)
1001 TAACCATTATAAGCTGCAATAAAACAAGTTAAACAACAACAATTGCATTATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGTTTTTAAAGCAAGTA

EcoRI (1122)
1101 AAACCTCTACAAATGTGGTATGGAATTTCTAAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATA
1201 AGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTCATGGAGTTTAAAGATATAGTGATTTTCCCAAGGTTTGA

SapI (1304)
SspI (1361)
SwaI (1375)
1301 ACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAAATTCAGAAAATAATTTAAATACATCATTGCAATGAAA

EcoO109I (1436)
1401 ATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGA
1501 AATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGTTGCCATTCATCTC
141◀ • N R T Y K L P I L E E I T T K V L K G N M E

SacI (1636)
BstXI (1665)
1601 AATGAGCACAAGCAGTCAGGAGCATAGTCAGAGTAGCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGCCACCTCATCAGAGTAG
118◀ 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 GGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGT
84▶ 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 Y

StuI (1800)
1801 AGGCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCGACATGGTGTCTGTTGTCCTCATAGAGCATGGTATCTTCTC
51▶ 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 E

BbsI (1946)
XmnI (1942)
1901 AGTGGCGACCTCCACCAGCTCCAGATCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTA
18▶ T A V E V L E L D Q Q S I N F T K M

AseI (2008)
SacI (2065)
2001 TGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACATAACGAGCTCTGCTTATATAGACCTCCACCGTACACGC

SpeI (2163)
2101 CTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGT

SnaBI (2291)
2201 GGAGACTTGAAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCGAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGAT

2301 GTACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTA
ACTGACTGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATA **NdeI (2396)**

2401 TGATACACTTGATGTA
CTGCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACG

2501 TCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGT
CAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACG **PacI (2582)**
PstI (2575) **SdaI (2574)** **BspLU11I (2592)**
CCTGCAGGTTAAITAAAGAACATGTGA

2601 GCAAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCT

2701 CAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAAGTCCCTCGTGCCTCTCTGTCCGACCTGCCGCTTAC

2801 CGGATACCTGTCCGCTTCTCCCTTCGGAAGCGTGGCGTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTG

2901 **ApaLI (2906)**
GGCTGTGTGCACGAACCCCGTTCAGCCCAGCCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGG

3001 CAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACGT

3101 ATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTT

3201 GTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACACAGTT

3301 **EagI (3342)**
PacI (3322) **SwaI (3331)** **NotI (3341)**
AAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAA

3401 TCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCT

3501 ATCGAA