



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

Psp1406I (203)
HindIII (245)
PvuII (239)
Bsu36I (291)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCCTCCCGCCTGTGGTGCCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NgoMI (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCCTGACCCTGCTTGCTCAACTCTACGCTTTGTTTCGTTT

KasI (535)
BspLU11I (560)
AgeI (552)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACCGGTCAACATGTTGACCGAGCTGGAGAAAGCCTTGAAGTCTATCAT
1▶ M L T E L E K A L N S I I

ScaI (614)
601 CGACGTCTACCACAAGTACTCCCTGATAAAGGGGAATTTCCATGCCGTCTACAGGGATGACCTGAAGAAATTGCTAGAGACCGAGTGTCTCAGTATATC
13▶ D V Y H K Y S L I K G N F H A V Y R D D L K K L L E T E C P Q Y I

EcoRV (736)
Eco32I (736)
HpaI (757)
701 AGGAAAAAGGGTGCAGACGTCTGGTTCAAAGAGTTGGATCAACACTGATGGTGCAGTTAACTCCAGGAGTTCCTCATTCTGGTGATAAAGATGGGCG
47▶ R K K G A D V W F K E L D I N T D G A V N F Q E F L I L V I K M G

MscI (860)
BalI (860)
NheI (854)
801 TGGCAGCCACAAAAAAGCCATGAAGAAAGCCACAAAGAGTAGCTGAGTTACTGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAA
80▶ V A A H K K S H E E S H K E •

HpaI (992)
901 CCACAAC TAGAATGCAGTGA AAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAA

MfeI (1003)
EcoRI (1088)
1001 CAACAATTGCATTCA TTTTATGTTTCAGGTT CAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGG AATTCTAAAT
1101 ACAGCATAGCAAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCA
1201 TTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTGCTCTTCATTCTTTATGTTTTAAATGCAC

SspI (1327)
SwaI (1341)
1301 TGACCTCCCACATTCCTTTTGTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCT

EcoO109I (1402)
1401 CAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTA
141▶ •

1501 GTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAG
140▶ 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 D S

SacI (1602)
BstXI (1631)
1601 ATGAGCTCTGACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCT
106▶ 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 F D K

StuI (1766)
Eco147I (1766)
1701 TCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCC
73▶ 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 I E G

1801 AGTCTGGTCTGATGGCCGCCGACATGGTCTGTTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGA
40▶ 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 Q Q

XmnI (1908)
BspHI (1916)
VspI (1974)
AseI (1974)
1901 GAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGAAGTCTATTACTATGCCATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGG
6▶ S I N F T K M

SacI (2031)
2001 CGTCTCCAGCTATCTGACGGTCACTAAACGAGCTGCTTATATAGACCTCCCACCGTACACGCCCTACCGCCATTGCGTCAATGGGCGGAGTTGT

SpeI (2129)
2101 TACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCT

SnaBI (2257)
Eco105I (2257)
2200 ATCCACGCCATTGATGTAAGTCCAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTCCAAAGTAGGAAAGTCCCATAGGTCAT

NdeI (2362)

2300 G T A C T G G G C A T A A T G C C A G G C G G G C C A T T T A C C G T C A T T G A C G T C A A T A G G G G G C T A C T T G G C A T A T G A T A C A C T T G A T G T A C T G C C A A G T G G G C A G T T

2400 T A C C G T A A A T A C T C C A C C C A T T G A C G T C A A T G G A A A G T C C T A T T G G C G T T A C T A T G G G A A C A T A C G T C A T T A T T G A C G T C A A T G G G C G G G G T C G T T G G

PstI (2541)
SdaI (2540) **PacI (2548)** **BspLU11I (2558)**

2500 G C G G T C A G C C A G G C G G G C C A T T T A C C G T A A G T T A T G T A A C G C C T G C A G G T T A A T T A A G A A C A T G T G A G C A A A A G G C C A G C A A A A G G C C A G G A A C C G T A

2598 A A A A G G C C G C G T T G C T G G C G T T T T T C C A T A G G C T C G C C C C C T G A C G A G C A T C A C A A A A A T C G A C G C T C A A G T C A G A G G T G G C G A A A C C G A C A G G A C T

2698 A T A A A G A T A C C A G G C G T T T C C C C T G G A A G T C C C T C G T G C G C T C T C T G T T C C G A C C C T G C C G C T T A C C G G A T A C C T G T C C G C C T T T C T C C T T C G G G A

ApaLI (2872)

2798 A G C G T G G C G C T T T C T C A T A G C T C A G C T G T A G G T A T C T C A G T T C G G T G T A G G T C G T T C G T C C A A G C T G G G C T G T G T G C A C G A A C C C C C G T T C A G C C C G

2898 A C C G C T G C G C C T T A T C C G G T A A C T A T C G T C T T G A G T C C A A C C C G T A A G A C A C G A C T T A T C G C C A C T G G C A G C A G C C A C T G G T A A C A G G A T T A G C A G A G C

2998 G A G G T A T G T A G G C G G T G C T A C A G A G T T C T T G A A G T G G T G G C T A A C T A C G G C T A C T A G A A A C A G T A T T T G G T A T C T G C G C T C T G C T G A A G C C A G T T

3098 A C C T T C G G A A A A A G A G T T G G T A G C T C T T G A T C C G G C A A C A A A C C A C C G C T G G T A G C G G T G G T T T T T T G T T T G C A A G C A G C A G A T T A C G C G C A G A A A A A

PacI (3288)

3198 A A G G A T C T C A A G A A G A T C C T T T G A T C T T T T C T A C G G G G T C T G A C G C T C A G T G G A A C G A A A A C T C A C G T T A A G G G A T T T T G G T C A T G G C T A G T T A A T T A A C

EagI (3308)
SwaI (3297) **NotI (3307)**

3298 A T T T A A A T C A G C G G C C G C A A T A A A A T A T C T T T A T T T T C A T T A C A T C T G T G T T G G T T T T T T G T G T G A A T C G T A A C T A A C A T A C G C T C T C C A T C A A A A C A

3398 A A A C G A A A C A A A A C A A A C T A G C A A A A T A G G C T G T C C C C A G T G C A A G T G C A G G T G C C A G A A C A T T T C T C T A T C G A A