



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAAGTGGCGCGGGTAAACTGGGAAAGTATGTCGTGTACTGGCTCCGCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
HindIII (245)
Bsu36I (291)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACGCGCCCGCCGCTACCTGAGGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCTCCTGAACTGCGTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCAGCTTTGCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

AgeI (552)
BspHI (560)
501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCTACCTGAGATCACCGGTATCATGACCAGTTTGAAGATGCTGACACAGAAGAGACAGT
1 M T S F E D A D T E E T V

SspI (648)
BstXI (689)
601 AACTTGTCTCCAGATGACGGTTTACCATCCTGGCCAGTTGAGTGTGGAATATTTTCAGTCAATAAGTTTAAACAGAGAGAAAACCTCCTCCAGCGAAGTG
13 T C L Q M T V Y H P G Q L Q C G I F Q S I S F N R E K L P S S E V

PvuII (778)
701 GTGAAATTTGGCCGAAATTCACATCTGTCTTATACTTTTTCAGGACAAACAGGTTTCCCGAGTTGAGTTTCTCTGCAGCTGTTTAAAAAATTCACA
47 V K F G R N S N I C H Y T F Q D K Q V S R V Q F S L Q L F K K F N
801 GCTCAGTTCTCTCTTTGAAATAAAAAATATGAGTAAAAAGACCAATCTGATCGTGGACAGCAGAGAGCTGGGCTACCTAAATAAAATGGACCTGCCATA
80 S S V L S F E I K N M S K K T N L I V D S R E L G Y L N K M D L P Y
901 CAGGTGCATGGTCAGATTCGAGAGTATCAGTTTCTGATGGAGAAGGAAGATGGCGAGTCATTGGAATTTTTGAGACTCAATTTATTTTATCTCCAAGA
113 R C M V R F G E Y Q F L M E K E D G E S L E F F E T Q F I L S P R
1001 TCACTCTTGCAAGAAAACAACCTGGCCACCACACAGGCCCATACCGAGTATGGCACTACTCGCTCTGCTCTCCCAAAGCAGTTCTCCGACAGAAATGG
147 S L L Q E N N W P P H R P I P E Y G T Y S L C S S Q S S S P T E M

NheI (117)
1101 ATGAAAATGAGTCATAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTAAAAAATGCTTTATTTG
180 D E N E S •

HpaI (1255)
MfeI (1266)
1201 TGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAAATTGCATTATTTTATGTTTCAGGTTTCAGGGG

EcoRI (1351)
1301 GAGGTGTGGGAGGTTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAACTCTAAAATACAGCATAGCAAACCTTTAACCTCCAAATCAAGCCTC
1401 TACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTT

SapI (1533)
SspI (1590)
1501 AAGATATAGTGTATTTTCCCAAGGTTTGAACCTAGCTCTTCAATTTCTTTATGTTTTAAATGCAGTACCTCCACATTCCTTTTATGTAATAATTCAGAA

SwaI (1604)
EcoO109I (1665)
1601 AATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGG
1701 ACTTAGGGAACAAAGGAACCTTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTCTGGTGTACTTGAGGGGGATGAGTTCCTCAATG
141 • N R T Y K L P I L E E I

SacI (1865)
BstXI (1894)
1801 GTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCC
127 T T K 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
1901 TGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCAGCAGACCCAATGGCAATGGC
94 I S R 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

StuI (2029)
2001 TTCAGCACAGACAGTACCTGCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCACTTGGTCTGATGGCCGCCGACATGGTGCTTG
61 E A C 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

BbsI (2175)
XmnI (2171)
2101 TTGTCCTCATAGAGCATGGTGTCTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTCTCATGGTGGCCCTCCTATAGT
27 N D E 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 (2237)
SacI (2294)
2201 GAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTC

SpeI (2392)
2301 TGCTTATATAGACCTCCACCGTACACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCA

2401 AAACAACTCCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTA
CTGCTACTGCCAAAACCGCATCATC

SnaBI (2520)

2501 ATGGTAATAGCGATGACTAATACGTAGATGTA
CTGCTACTGCCAAGTAGGAAAGTCCCATAGGTCATGTA
CTGGGCATAATGCCAGGCGGGCCATTTACCGTCAT

NdeI (2625)

2601 TGACGTCAATAGGGGCGTACTTGGCATATGATACTT
GATGTA
CTGCTACTGCCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGT

2701 CCCTATTGGCGTTACTATGGGAACATACGTCATT
ATTGACGTCAATGGGCGGGGTCGTTGGGCGGT
CAGCCAGGCGGGCCATTTACCGTAAGTTATGTA

PaeI (2811)

PstI (2804)

SdaI (2803)

BspLU11I (2821)

2801 ACGCCTGCAGGTTAATAAGAACATGTGAGCAAAGGCCAGGAAACCGTAAAAAGCCGCGTTGCTGGCGTTTTCCATAGGCTCCGCC

2901 CCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTCCCCCTGGAAGCTCCCTCGTG

3001 CGCTCTCTGTTCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCAGCTGTAGGTATCTCA

ApaLI (3135)

3101 GTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTCCAGCCGACCCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAA

3201 CCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGG

3301 CCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAC

3401 AAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTC

EagI (3571)

PaeI (3551) SmaI (3560) NotI (3570)

3501 TGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCAT

3601 TACATCTGTGTTGGTTTTTTTGTGTAATCGTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAG

3701 TGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA