



PvuI (7)
SgfI (6) MfeI (82) EcoNI (96)
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) HindIII (245) **Bsu36I (291)**
PvuII (239) EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTCGCGTTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NcoI (560)
BstEII (555)
AgeI (552)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCGCTACCTAGACTCAGCCGGCTCTCCACGCTTGGCTGACCCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCCCTACCTGAGATCACCGGTCACCATGGCCACGCCACGCTCTCCGCCGCCCCAGCAATCC
1 M A H A T L S A A P S N P

BssHII (651) **BstAPI**
601 CCGGCTCCTGCGGGTGGCCTGCTGCTCCTGCTCCTGGTGGCCGCCAGCCGGCGCGCAGCAGGAGCGTCCGTGGTCACTGAAGTGCCTGCCAGTGCCTTG
13 R L L R V A L L L L L V A A S R R A A G A S V V T E L R C Q C L
701 CAGACACTGCAGGGAATTCACCTCAAGAACATCAAAGTGTGAATGTAAGTCCCGGACCCCACTGCGCCAAACCGAAGTCATAGCCACACTCAAGA
47 Q T L Q G I H L K N I Q S V N V R S P G P H C A Q T E V I A T L K

HindIII (809) NcoI (833) **NheI (889)**
801 ATGGGAAGAAAGCTTGCTCAACCCCGCATCCCCATGGTTTCAGAAAATCATCGAAAAGATACTGAACAAGGGGAGCACCAACTGACAGGCTAGCTGGCC
80 N G K K A C L N P A S P M V Q K I I E K I L N K G S T N •
901 AGACATGATAAGATACATTGATGAGTTTGACAAACCACAACCTAGAATGCAGTAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTT

HpaI (1027) MfeI (1038)
1001 GTAACATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTCATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGT

EcoRI (1123)
1101 AAAACCTCTACAATGTGGTATGGAATTTCTAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAAT
1201 AAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTTAAGATATAGTGTATTTTCCCAAGGTTTG

SapI (1305) **SspI (1362)** **SwaI (1376)**
1301 AACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTGTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAA

EcoO109I (1437)
1401 AATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAG
1501 AAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGCTGTTACTTGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCT
141 N R T Y K L P I L E E I T T K V L K G N M E

SacI (1637) **BstXI (1666)**
1601 CAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGTCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTA
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 GGGGTGCCGACAGCCACAATGGTGTCAAAGTCTTCTGCCGCTTCTCAGCAGCAGCCAAATGGCAATGGCTTCAGCAGACAGCAGTACCCTGCCAATG
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 (1801)
1801 TAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGCTTGGTCTGATGGCCGCCCGACATGGTGTCTTGTGCTCATAGAGCATGGTGTCTTCT
51 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 E

BbsI (1947) **XmnI (1943)**
1901 CAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCCTATAGTGAGTCGTATTATACTATGCCGATATACT
18 T A V E V L E L D Q Q S I N F T K M

AseI (2009) **SacI (2066)**
2001 ATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACAGC

SpeI (2164)
2101 CCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAATGGGG

SnaBI (2292)
2201 TGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGA

NdeI (2397)
2301 TGTACTGCCAAGTAGGAAAGTCCATAAGTTCATGTAAGTGGGCATAATGCCAGGGGGCCATTACCCTGATTGACGTCAATAGGGGGCTACTTGGCAT
2401 ATGATACACTTGTACTGCCAAGTGGGCAGTTTACCCTAAACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATAC

PacI (2583)

PstI (2576)

SdaI (2575)

BspLU11I (2593)

2501 GTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA**TTAAGAACATGTG**
2601 AGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGC
2701 TCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTGCCGCTTA
2801 CCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCT

ApaLI (2907)

2901 GGGCTGTGTGCACGAACCCCGTTCCAGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTG
3001 GCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAG
3101 TATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTT
3201 TGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACCTCACGT

EagI (3343)

PacI (3323) SwaI (3332)

NotI (3342)

3301 TAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGGTTTTTTGTGTGA
3401 ATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTC
3501 TATCGAA