



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGAGAAGTTGGGGGAGGGGTCCGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGTGCTGTACTGGCTCCGCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) **HindIII (245)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTTCGAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCCTTACCGCGCCCGCCCTACCTGAGGCC

301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

BstEII (555) **AgeI (552)** **NcoI (560)** **PshAI (576)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTACCATGGCGCTTTGTTGACCACGGTCATTGCTCTCACTTG

130 ▶ M A L L L T T V I A L T C

Bsu36I (645)
601 CCTTGGCGGCTTTGCCTCCCCAGGCCCTGTGCCTCCCTCTACAGCCCTCAGGGAGCTCATTGAGGAGCTGGTCAACATCACCCAGAACCAGAAAGGCTCCG
13▶ L G G F A S P G P V P P S T A L R E L I E E L V N I T Q N Q K A P

PstI (786)
701 CTCTGCAATGGCAGCATGGTATGGAGCATCAACCTGACAGCTGGCATGTACTGTGCAGCCCTGGAATCCCTGATCAACGTGTCAGGCTGCAGTGCCATCG
47▶ L C N G S M V W S I N L T A G M Y C A A L E S L I N V S G C S A I

BbsI (801) **XcmI (881)**
801 AGAAGACCAGAGGATGCTGAGCGGATTCTGCCCGACAAGGCTCAGCTGGGCGATTTCCAGCTTGCATGTCCGAGACACAAAATCGAGGTGGCCCA
80▶ E K T Q R M L S G F C P H K V S A G Q F S S L H V R D T K I E V A Q

NruI (939) **BstBI (964)** **Bsp119I (964)**
901 GTTTGTAAGGACCTGCTCTTACATTTAAAGAACTTTTTCCGCGAGGGACGGTTCAACTGAAACTTTCGAAAGCATCATTATTTGCAGAGACAGGACCTGA
113▶ F V K D L L L H L K K L F R E G R F N •

MscI (1007)
NheI (1001)
1001 CGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCT

HpaI (1139) **MfeI (1150)**
1101 ATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAAACAACAACAATTGCATTCTTTTATGTTTCAGGTTTCAGGGGGAGGTGTGGGAGGTTT

EcoRI (1235)
1201 TTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTC

1301 TGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTT

SapI (1417) **SspI (1474)** **Swal (1488)**
1401 TCCCAAGGTTTGAAGTCTCTTCAATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAATATTCAGAAAATAATTTAAATACAT

1501 CATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGG

1601 AACCTTTAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTTCTCAATGGTGGTTTTGACCAGCT
141◀ • N R T Y K L P I L E E I T T K V L K

BstXI (1778)
1701 TGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCAC
122◀ 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 I S R D V
1801 CTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTACGACAGACAGTG
89◀ 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 E A C V T

StuI (1913)
1901 ACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCGCCCGACATGGTGCTTGTGCTCATAGAGCA
55◀ 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 N D E Y L M

BbsI (2059)
XmnI (2055)
2001 TGGTGATCTTCTCAGTGGCGACCTCCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCTCTATAGTGAGTCGTATTATACTA
22◀ T I K E T A V E V L E L D Q Q S I N F T K M

AseI (2121)
2101 TGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTC

SpeI (2276)
2201 CCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGICAAAACAAACTCCCATTG

2301 ACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGA

SnaBI (2404)

2401 CTAATACGTAGATGTAAGTCCCAAGTAGGAAAGTCCCATAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGG

NdeI (2509)

2501 CGTACTTGGCATATGATACACTTGTACTGCAAGTGGGCAGTTTACCCTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACT

PacI (2695)

PstI (2688)

SdaI (2687)

2601 ATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAAAT

BspLU11I (2705)

2701 TAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC

2801 AAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGA

2901 CCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGT

ApaLI (3019)

3001 TCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTAGCCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGTAGTCCAACCCGGTAAGACACGAC

3101 TTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACA

3201 CTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAG

3301 CCGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGTCTGACGCTCAGTGGAAAC

EagI (3455)

PacI (3435) SwaI (3444) **NotI (3454)**

3401 GAAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGG

3501 TTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGAAGTGCAGGTGCC

3601 AGAACATTTCTCTATCGAA