



100

PvuI (7)
SgfI (6)
MfeI (82) **EcoNI (96)**

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCGCTACCTGAGGCC

301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCCTGAAGTGCCTCGCGCTAGGTAAGTTAAAGCTCAGGTCGAGACC

NgoMI (441) **NaeI (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTCTCAACTCTACGCTTTTGTTCGTTT

KasI (535) **AgeI (552)** **BspLU11I (560)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCAACATGTGCTTCATAAAACAGGGATGGTGTCTGGTCTGGTCTGGA

601 ACTGCTACTGCTGCCCTTGGAACTGGATTTCAGGTCATTCAATACAGATATAAATGCCACCCGGCAGCAATGTAAACCCTGAAAATCCATAAGGAC

13▶ M C F I K Q G W C L V L E

701 CCACTTGACCATATAAAGTATCACCTGGCTTCACTATAAATCAGAAGATTTAGAGTACAATAATAGTACAAAGACAATCTTCGAGTCTGAAT

47▶ P L G P Y K R I T W L H T K N Q K I L E Y N Y N S T K T I F E S E

ApaLI (833) **BspEI (854)** **Acc65I (871)** **Asp718I (871)**
Bsu36I (999)

801 TTAAGGCAGGGTTTATCTTGAAGAAAACGATGGTGCACCTTCATATCTCTAATGTCCGAAAGAGGACAAAGGTACCTACTACATGAGAGTGTGCGTGA

80▶ F K G R V Y L E E N D G A L H I S N V R K E D K G T Y Y M R V L R E

901 AACTGAGAACGAGTTGAAGATAACCCTGGAAGTATTTGATCCTGTGCCAAGCCTTCCATAGAAATCAATAAGACTGAAGCGTCGACTGATTCCTGTCCAC

113▶ T E N E L K I T L E V F D P V P K P S I E I N K T E A S T D S C H

1001 CTGAGGCTATCGTGTGAGGTAAGGACCAGCATGTTGACTATACTTGGTATGAGAGCTCGGGACCTTTCCCAAAAAGAGTCCAGGATATGTGCTCGATC

147▶ L R L S C E V K D Q H V D Y T W Y E S S G P F P K K S P G Y V L D

1101 TCATCGTCACACCACAGAACAAGTCTACATTTTACACCTGCCAAGTCAGCAATCTGTAAAGCAGCAAGAACGACACAGTGTACTTCACTCTACCTTGTGA

180▶ L I V T P Q N K S T F Y T C Q V S N P V S S K N D T V Y F T L P C D

BglII (1207) **BamHI (1268)**
HpaI (1275)

1201 TCTAGCCAGATCTTCTGGAGTATGTTGGACTGCAACTTGGCTAGTGGTGCACAACTCATCATTACAGGATCCTGTTAACCTGACAAGAACTTTCTCA

213▶ L A R S S G V C W T A T W L V V T T L I I H R I L L T •

MscI (1319) **NheI (1313)**

1301 CCCAAGAAGGCAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAA

HpaI (1451) **MfeI (1462)**

1401 ATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGG

EcoRI (1547)

1501 TGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTTAAAATACAGCATAGCAAACTTTAACCTCCAAATCAAGCCTCTACT

1601 TGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGAGCCTCACCTTCTTTCATGGAGTTAAGA

SspI (1786)

1701 TATAGTATTTTTCCCAAGGTTTGAAGTACTCTTCATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAAATTCAGAAATA

SwaI (1800)

1801 ATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTT

1901 AGGGAACAAGGAACCTTAAATAGAAAATTGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGG

141▶ • N R T Y K L P I L E E I T T

BstXI (2090)

2001 TTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACCTGAT

126▶ 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 I

2101 GGATCTGTCCACCTCATCAGAGTGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCA

93▶ 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 E

StuI (2225) **Eco147I (2225)**

2201 GCACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTTGGTCTGATGGCCGCCCGACATGGTGTCTGTTGT

59▶ 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 N D

BspHI (2375) **XmnI (2367)**

2301 CCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTCATGATGGCCCTCTATAGTGAGT

26▶ 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

VspI (2433)
AseI (2433)

2401 CGTATTACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGCTCTGC

SpeI (2588)

2500 TTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAA

2599 ACAAACCTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCAT

SnaBI (2716)
Eco105I (2716)

2699 GGTAATAGCGATGACTAATACGTAGATGTAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTG

NdeI (2821)

2799 ACGTCAATAGGGGCGTACTTGGCATATGATACACTTGTACTGTTGAGTGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCC

2899 CTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCTGTTGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAAC

PstI (3000)
SdaI (2999) PacI (3007) BspLU11I (3017)

2999 GCCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCC

3097 CCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTG

3197 CGCTCTCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCA

ApaLI (3331)

3297 GTTCGGTGTAGGTCGTTTCGCTCCAAGTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGTAGTCCAA

3397 CCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGG

3497 CCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAC

3597 AAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTC

EagI (3767)
PacI (3747) SmaI (3756) NotI (3766)

3697 TGACGCTCAGTGGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCA

3796 TTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCA

3896 GTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA