

PvuI (7)
SgfI (6)

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203)

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC

301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMI (441)
NaeI (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

NcoI (560)
BstEII (555)
KasI (535)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTACCCATGGCGGCTCTGAAGAGTTGGCTGTCGCCGAGCGTAAC

1▶ M A A L K S W L S R S V T

NcoI (682)

601 TTCATTCTCAGGTACAGACAGTGTGTTGTGTTCTGTTGTGGCTAACTTTAAGAAGCGGTGTTTCTCAGAATTGATAAGACCATGGCACAAAACCTGTG

13▶ S F F R Y R Q C L C V P V V A N F K K R C F S E L I R P W H K T V

701 ACGATTGGCTTTGGAGTAACCTGTGTGCGGTTCTATTGCACAGAAATCAGAGCCTCATTCCCTTAGTAGTGAAGCATTGATGAGGAGAGCAGTGTCTT

47▶ T I G F G V T L C A V P I A Q K S E P H S L S S E A L M R R A V S

NdeI (839)

801 TGGTAACAGATAGCACCTCTACCTTTCTCTCAGACCACATATGCGTTGATTGAAGCTATTACTGAATATACTAAGGCTGTTTATACCTTAACCTTCTCT

80▶ L V T D S T S T F L S Q T T Y A L I E A I T E Y T K A V Y T L T S L

EcoRI (933)

901 TTACCGACAATATAACAAGTTTACTTGGGAAAATGAATTCAGAGGAGGAAGATGAAGTGTGGCAGGTGATCATAGGAGCCAGAGCTGAGATGACTTCAAAA

113▶ Y R Q Y T S L L G K M N S E E E D E V W Q V I I G A R A E M T S K

ScaI (1007)
BstAPI (1063)

1001 CACCAAGAGTACTTGAAGCTGGAACCCTTGGATGACTGCAGTTGGTCTTTTCAGAGATGGCAGCAGAAGCTGCATCAAACTGGCGCAGATCAGGCCCT

147▶ H Q E Y L K L E T T W M T A V G L S E M A A E A A Y Q T G A D Q A

PvuII (1123)
ApaLI (1150)

1101 CTATAACCGCCAGGAATCACATTCAGCTGGTAAAACCTGCAGGTGGAAGAGGTGCACCAGCTCTCCCGAAAGCAGAAACCAAGCTGGCAGAAGCACAGAT

180▶ S I T A R N H I Q L V K L Q V E E V H Q L S R K A E T K L A E A Q I

BsrBI (1237)
EcoO109I (1281)

1201 AGAAGAGCTCCGTGAGAAAACACAGGAGGAAGGGGAGGAGCGGCTGAGTCGGAGCAGGAGGCCTACCTGCGTGAGGATTGAGGGCCTGAGCACACTGCC

213▶ E E L R Q K T Q E E G E E R A E S E Q E A Y L R E D •

MscI (1319)
NheI (1313)

1301 CTGTCTCCCACTGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAA

HpaI (1451)

1401 ATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAACAAGTTAAACAACAACATTCATTCTTTATGTTTCAGGTTTCAGGGGGAGG

EcoRI (1547)

1501 TGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAACCTTTAACCTCCAATCAAGCCTCTACT

1601 TGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCATGGAGTTAAGA

SspI (1786)

1701 TATAGTGATTTTCCCAAGGTTTGAAGTACTCTTCATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAATATTGAGAAATA

SwaI (1800)
EcoO109I (1861)

1801 ATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTT

1901 AGGGAACAAAGGAACCTTAAATAGAAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGG

141▶ • N R T Y K L P I L E E I T T

BstXI (2090)

2001 TTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGAT

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 GGATCTGTCCACCTCATCAGAGTGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCA

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

2201 GCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTGGTCTGATGGCCGCCCCGACATGGTGCTTGTGT

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 CCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTTCTCATGATGGCCCTCTATAGTGAGT

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 CGTATTACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGC

SpeI (2588)

2500 TTATATAGACCTCCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAA

2599 ACAAACCTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCAT

SnaBI (2716)
Eco105I (2716)

2699 GGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTG

NdeI (2821)

2799 ACGTCAATAGGGGCGTACTTGGCATATGATACTTGTACTGTACTGCCAAGTGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCC

2899 CTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCTGTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGTTATGTAAC

PciI (3017)
SdaI (2999) PacI (3007) BspLU11I (3017)

2999 GCCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGAAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCC

3097 CCCTGACGAGCATCACA AAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTG

3197 CGCTCTCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCA

ApaLI (3331)

3297 GTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGTAGTCCAA

3397 CCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGG

3497 CCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAC

3597 AAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTC

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

3697 TGACGCTCAGTGGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCAT

3797 TACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAG

3897 TGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA