



PvuI (7)
SgfI (6) 1 GGATCTGGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA MfeI (82) EcoNI (96)

101 GAGAAGGTGGCGGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGCCGCCGCCCTACCTGAGGCC

301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCCTCCCGCCTGTGGTGCCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441) **NaeI (441)**
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCGCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **BspHI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACAGGTCATCATGAAGAAAAGTGGTGTCTTTTCTCTTGGGCATCAT
1▶ M K K S G V L F L L G I I

601 CTTGCTGGTTCTGATTGGAGTGAAGGAACCCAGTAGTGAGAAAAGGTCGCTGTTCTGCATCAGCACAACCAAGGACTATCCACCTACAATCCTTG
13▶ L L V L I G V Q G T P V V R K G R C S C I S T N Q G T I H L Q S L

BspLU111 (778)
701 AAAGACCTTAAACAATTTGCCCAAGCCCTTCTGCGAGAAAATTGAAATCATTGCTACACTGAAGAATGGAGTTCAAACATGCTAAACCCAGATTCAG
47▶ K D L K Q F A P S P S C E K I E I I A T L K N G V Q T C L N P D S

BstBI (899)
801 CAGATGTGAAGAACTGATTAATAAAGTGGGAGAAAACAGGTCAGCCAAAAGAAAAGCAAAAAGAATGGGAAAAACATCAAAAAAGAAAGTTCTGAAAGT
80▶ A D V K E L I K K W E K Q V S Q K K K Q K N G K K H Q K K K V L K V

Psp1406I (911) **BbsI (927)**
901 TCGAAAATCTCAACGTTCTCGTCAAAAGAAAGACTACATAAGAGACCACTTACCAATAAGTATTCTGTGTTAAAAATGTTCTATTTTAATTATACCGCTA
113▶ R K S Q R S R Q K K T T •

MscI (1029) **NheI (1023)**
1001 TCATTCAAAGGAGGATGGCATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTAAAAAATGCTT

HpaI (1161) **MfeI (1172)**
1101 TATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTAAACAACAACATTGCATTCATTTTATGTTTCAGGTT

EcoRI (1257)
1201 CAGGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTTCAAAATACAGCATAGCAAACTTTAACCTCCAATCA
1301 AGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGAGCCTCACCTTCTTTCATG

SspI (1496)
1401 GAGTTTAAGATATAGTGATTTTTCCAAGGTTTGAAGTCTCTTCAATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGTAATAA

SwaI (1510) **EcoO109I (1571)**
1501 TTCAGAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGT
1601 AGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCC
141▶ • N R T Y K L P I L E

SacI (1771)
1701 TCAATGGTGGTTTTGACCAGCTTCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGA
129▶ E I 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

BstXI (1800)
1801 CCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGC
96▶ V R 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

StuI (1935)
1901 AATGGCTTCAAGCAGACAGTACCCTGCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCGACATGG
63▶ I A 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

BspHI (2085) **BbsI (2081)**
2001 TGCTTGTGCTCATAGAGCATGGTATCTTCTCAGTGGCGACTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCC
29▶ H K 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

XmnI (2077)
2101 TATAGTGAATGATTATACTATGCGGATATACTATGCGGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCACTAAA

SacI (2200) **SpeI (2298)**
2200 CGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTA
2300 CTAGTCAAACAAACTCCATTGACGTCATGGGGTGGAGACTTGGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGACTGCCAAAACC

SnaBI (2426)
2399 GCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGACTGGGCATAATGCCAGGCGGGCCATTT

NdeI (2531)

2499 ACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAA

2599 TGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGCGGGGGTCTGTTGGCGGTTCAGCCAGGCGGGCCATTTACCGTAA

PstI (2710)

SdaI (2709) **PacI (2717)** **BspLU11I (2727)**

2699 GTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGAAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATA

2797 GGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTGGAAG

2897 CTCCCTCGTGGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCATAGCTCACGCTGT

ApaLI (3041)

2997 AGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCAGCCGCTGCGCCTTATCCGGTAACTATCGTC

3097 TTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTT

3197 GAAGTGGTGGCCTAACTACGGCTACACTAGAAGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGA

3297 TCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTT

EagI (3477)

PacI (3457) **SwaI (3466)** **NotI (3476)**

3397 CTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGCCGCAATAAAATATCT

3497 TTATTTTCATTACATCTGTGTGTTGGTTTTTTGTTGTAATCGTAACTAACATACGCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGG

3597 CTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA