



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGTGCCTA
101 GAGAAGTGGCGGGGTAACGGAAAGTGTGCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) **PvuII (239)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTCGCAACGGGTTTCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGTTGAGTTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NgoMI (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTCCTGACCCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT

BstEII (555)
KasI (535) **AgeI (552)** **NcoI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTACCATTGGAGTCCATGTCTGAGCTCGGCCCGCTGCCTCTT
601 ATTCCTTTGCTGCTGCTGCTTCCGCTGCTGCTCCTTCTGCCCGAAGCTAGGCCGAGTCCCGCGGGGCTGAGGAGACCGACTGGGTGCGATTGCC
701 AGCAAATGCGAAGTGTGCAAGTATGTTGCTGTGGAGCTGAAAGTCCGCTTTTGGAGAAACGGGAAAGCAAGGAAAGTATTGACACCGGCTATGGCATCC
801 TGGACGGGAGGGCTCTGGAGTCAAGTACACCAAGTCCGACTTACGGTTAATTGAAGTCACTGAGACCATTTGCAAGAGGCTTCTGGACTACAGCCTGCA
901 CAAGGAGAGGACTGGCAGCAACCGTTTCCAAGGGTATGTCGGAGACCTTTGAGACGCTGCACAACCTAGTCCACAAAGGGTCAAGGTGGTATGGAT
1001 ATCCCTATGAGCTGTGGAACGAGACCTCAGCAGAGGTGGCTGACCTCAAGAAGCAGTGTGACGTGCTGGTGGAAAGATTTGAAGAGGTGATTGAGGACT
1101 GGTACAGGAACCACCAGGAGGAAGACCTGACTGAATTCCTCTGTGCCAACACGTGCTGAAGGAAAGGACACGAGTTGCCTAGCAGAGCGGTGGTCTGG
1201 CAAGAAGGGGACATAGCCTCCCTGGGAGGGAAGAAATCCAAGAAGAAGCGCAGCGGAGTCAAGGGCTCCTCCAGTGGCAGCAGCAAGCAGAGGAAGGAA
1301 CTGGGGGCTGGGGAGGATGCCAACGCCGAGGAGGAGGGTGTGCAGAAGGCATCGCCCTCCACACAGCCCCCTGATGAGCTGTGAGCCAGC
1401 TTAGTGCCTTGAATCAAGACCCCTGACTTCAGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAAC TAGAATGCAGTGA

AgeI (920) **EcoRV (997)**
Eco32I (997)
BsiBI (993)
BsaBI (993)
1101 GGTACAGGAACCACCAGGAGGAAGACCTGACTGAATTCCTCTGTGCCAACACGTGCTGAAGGAAAGGACACGAGTTGCCTAGCAGAGCGGTGGTCTGG
1201 CAAGAAGGGGACATAGCCTCCCTGGGAGGGAAGAAATCCAAGAAGAAGCGCAGCGGAGTCAAGGGCTCCTCCAGTGGCAGCAGCAAGCAGAGGAAGGAA
1301 CTGGGGGCTGGGGAGGATGCCAACGCCGAGGAGGAGGGTGTGCAGAAGGCATCGCCCTCCACACAGCCCCCTGATGAGCTGTGAGCCAGC
1401 TTAGTGCCTTGAATCAAGACCCCTGACTTCAGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAAC TAGAATGCAGTGA

PmlI (1150)
Eco72I (1150)
EcoRI (1132) **BbrPI (1150)** **BsrBI (1186)**
1101 GGTACAGGAACCACCAGGAGGAAGACCTGACTGAATTCCTCTGTGCCAACACGTGCTGAAGGAAAGGACACGAGTTGCCTAGCAGAGCGGTGGTCTGG
1201 CAAGAAGGGGACATAGCCTCCCTGGGAGGGAAGAAATCCAAGAAGAAGCGCAGCGGAGTCAAGGGCTCCTCCAGTGGCAGCAGCAAGCAGAGGAAGGAA
1301 CTGGGGGCTGGGGAGGATGCCAACGCCGAGGAGGAGGGTGTGCAGAAGGCATCGCCCTCCACACAGCCCCCTGATGAGCTGTGAGCCAGC
1401 TTAGTGCCTTGAATCAAGACCCCTGACTTCAGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAAC TAGAATGCAGTGA

MscI (1440)
BalI (1440)
NheI (1434)
1501 AAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTCAATTTTA
1601 TGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAAATCTAAAATACAGCATAGCAAACTTTAA
1701 CCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCAATGTGCATTAGCTGTTTGCAGCCTCAC
1801 CTTCTTTCATGGAGTTTAAAGATATAGTGTATTTCCCAAGTTTGAAGTACTCTTCATTTCTTTATGTTTTAAATGACTGACCTCCACATTCCTTTT

HpaI (1572) **MfeI (1583)**
EcoRI (1668)
1901 TTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCC
2001 CCCAGTTTATGATTTGGACTTAGGGAACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGAGGG
2101 GGATGAGTTCCTCAATGGTGGTTTTGACAGCTTGCATTCTCAATGAGCACAAAGCAGTCAAGGATGATGAGATGATGCTCTGCACATGCC
2201 ACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCA
2301 GACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCG

SspI (1907) **SwaI (1921)** **EcoO109I (1982)**
2101 GGATGAGTTCCTCAATGGTGGTTTTGACAGCTTGCATTCTCAATGAGCACAAAGCAGTCAAGGATGATGAGATGATGCTCTGCACATGCC
2201 ACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCA
2301 GACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCG

BstXI (2211)
StuI (2346)
Eco147I (2346)
2101 GGATGAGTTCCTCAATGGTGGTTTTGACAGCTTGCATTCTCAATGAGCACAAAGCAGTCAAGGATGATGAGATGATGCTCTGCACATGCC
2201 ACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCA
2301 GACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCG

2401 CCCCACATGGTCTTGTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCAT
33 aGlyValHisHisLysAsnAspGluTyrLeuMetThrIleLysGluThrAlaValGluValLeuGluLeuAspGluNlnSerIleAsnPheThrLysMet

2501 GATGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACG

2601 GTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCC

2701 CGTTGATTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAC

2800 TGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGG

2900 CGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGCCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCA

3000 TTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGGGGGGTCTTGGGCGGTGAGCCAGGCGGGCCA

3100 TTTACCGTAAGTTATGTAACGCCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGAAAGCCAGGAACCGTAAAAAGGCCGCTTGTCTGGCG

3198 TTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTC

3298 CCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAG

3398 CTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCTCCAGCTGGGCTGTGTGCACGAACCCCGTTTCCAGCCGACCGCTGCGCCTTATCCGGT

3498 AACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTA

3598 CAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGG

3698 TAGCTCTTGATCCGGCAAACAACCCAGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCT

3798 TTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAA

3898 TAAAAATCTTTATTTTTCATTACATCTGTGTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTA

3998 GCAAAATAGGCTGTCCCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA