



PvuI (7)
SgfI (6) 1 GGATCTGCGATCGCTCCGGTGCCGTCAGTGGGCAGAGCGCACATCGCCACAGTCCCGAGAAGTTGGGGGAGGGGTGCGCAATTGAACGGGTGCCTA
MfeI (82)
101 GAGAAAGTGGCGCGGGTAAACTGGAAAAGTGTGCTGTACTGGCTCCGCCTTTTTCCAGAGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) 201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
PvuII (239)
Bsu36I (291)
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTGCGCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTTCCTGACCTGCTTGTCAACTCTACGCTTTTGTTCGTTT

AgeI (552) **NcoI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTACCATGGCTCGGGGCACACCTCTACATCGCCACGGACGG
601 CTCGGAGATGCCGCGGAGATCGTGGAGCTGCATGAGATCGAGTTGGAGACCATCCCGTGGAGACCATCGAGACCAGTGTGGCGGAGGAGGAG
13▶ S E M P A E I V E L H E I E V E T I P V E T I E T T V V G E E E E
701 GAGGACGACGACGAGGAGCGGCGCGGCGGCAGCACGCGCGGGGGGCGGCACGGGCGCGGCCACCACCATCACCACCACCACCACC
47▶ E D D D D E D G G G D H G G G G G H G H A G H H H H H H H

PstI (823)
801 ACCACCACCCGCCATGATCGCGCTGCAGCCGCTGGTACGGACGACCCGACCAAGTGCACCACCAGGAGGTGATCCTGGTGCAGACGCGCGAGGA
80▶ H H H P P M I A L Q P L V T D D P T Q V H H H Q E V I L V Q T R E E
BssHIII (930) **BsaBI (957)**
901 GGTGGTCGGCGGGAGCAGCTCGGACGGCTGCGCGCCGAGGACGGCTTCGAGGACCATCCTCATCCCGGTGCCCGCGCGGCGCGGCGGCGAGCAGC
113▶ V V G G D D S D G L R A E D G F E D Q I L I P V P A P A G G D D D

PshAI (1011) **BsrBI (1041)** **BsrBI (1098)**
1001 TACATAGACGAGCAGCTGGTCACCGTGGCGGGCCGCAAGAGCGCGGGGGCCCTCGTCGGGCGCGGTGCGTGAAGAAGGGCGGGCGCAAGAAGA
147▶ Y I E Q T L V T V A A A G K S G G G A S S G G G R V K K G G G K K
XmaI (1158)
1101 GCGGAAGAAGAGTTACCTGGCGGGGGCCGGCGGGGGCGGGCGCGCCGACCCGGGAATAAGAAGTGGGAGCAGAAGCAGGTGCAGATCAA
180▶ S G K K S Y L G G G A G A A G G G G A D P G N K K W E Q K Q V Q I K

DraIII (1224)
1201 GACCCTGGAGGGCGAGTTCTCGTCCACCATGTGGTCCCTCGGATGAAAAAAGATATTGACCATGAAACAGTGGTTGAAGAGCAGATCATTGGAGAGAAC
213▶ T L E G E F S V T M W S S D E K K D I D H E T V V E E Q I I G E N
BstAPI (1390)
1301 TCACCTCTGATTATTCTGAATATATGACAGGCAAGAACTCCTCCTGGAGGATACCTGGCATTGACCTCTCAGACCCTAAGCAACTGGCAGAATTTG
247▶ S P P D Y S E Y M T G K K L P P G G I P G I D L S D P K Q L A E F
1401 CCAGAATGAAGCAAGAAAAATTAAGAAGATGATGCTCCAAGAACAATAGCTTGCCTCATAAAGGCTGCACAAAGATGTTCAAGGATAACTCTGCTAT
280▶ A R M K P R K I K E D D A P R T I A C P H K G C T K M F R D N S A M

PvuII (1591)
1501 GAGAAAGCATCTGCACACCCACGGTCCCAGAGTCCACGTCTGTGCAGAGTGTGGCAAAGCGTTCGTTGAGAGCTCAAAGCTAAAACGACACCCAGCTGGTT
313▶ R K H L H T H G P R V H V C A E C G K A F V E S S K L K R H Q L V
BspLU11I (1677)

BstBI (1630) **Eco4VII (1646)** **FspI (1670)**
1601 CATACTGGAGAAAAGCCCTTTTCAGTGCACATTCGAAGGCTCGCGGAAGCGCTTTTCACTGGACTTCAATTTGCGCACACATGTGCGAATCCATACCGGAG
347▶ H T G E K P F Q C T F E G C G K R F S L D F N L R T H V R I H T G
1701 ACAGGCCCTATGTGTGCCCTTCGACGGTTGTAATAAGAAGTTTGCTCAGTCAACTAACCTGAAATCTCACATCTTAACACACGCTAAAGCAAAAACAA
380▶ D R P Y V C P F D G C N K K F A Q S T N L K S H I L T H A K A K N N

MscI (1818) **NheI (1812)**
1801 CCAGTGAAAAGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAA
413▶ Q •

HpaI (1950) **MfeI (1961)**
1901 TTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAAGTTAACAACAACAATTGCATTCTTTATGTTTCAGGTTCAAGGGGAGGT

EcoRI (2046)
2001 GTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAAATCAAGCCTCTACTT
2101 GAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTCAGCCTCACCTTCTTCATGGAGTTAAGAT

SspI (2285) **SwaI (2299)**
2201 ATAGTGATTTTTCCCAAGGTTTGAAGTACTCTTCATTTCTTTATGTTTTAAATGCAGCTGACCTCCACATTCCTTTTATGTAATAATTCAGAAATAA
2301 TTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTA
2401 GGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTACTTGGAGGGGATGAGTTCCTCAATGGTGGT

2501 TTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATG
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
2601 GATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCCTTCTGCCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAG
92 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 A
2701 CACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCGACATGGTGTCTGTTGTC
59 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
2801 CTCATAGAGCATGGTGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCTCCTATAGTGAGTC
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
2901 GTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGCTCTGCTT
3001 ATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACA
3101 AACTCCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGACTGCCAAAACCGCATCATCATGGT
3201 AATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTACCCTGATTGACG
3301 TCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCGAGTTACCCTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTA
3401 TTGGCGTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGGCCATTACCCTAAGTTATGTAACGCC
3501 TGCAGGTTAATAAGAACATGTGAGCAAAAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTCCATAGGCTCCGCCCCCTG
3601 ACGAGCATCAGAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCCTGGAAGCTCCCTCGTGGCGTC
3701 TCCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGAAGCGTGGCGCTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCCG
3801 GTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTGAGCCGACCGCTGCGCTTATCCGTAACCTATCGTCTTGTAGTCCAACCCGG
3901 TAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAA
4001 CTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAACC
4101 ACCGCTGGTAGCGGTGGTTTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACG
4201 CTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACAT
4301 CTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCAAGTGCAA
4401 GTGCAGGTGCCAGAACATTTCTCTATCGAA