



PvuI (7)
SgfI (6) 1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA MfeI (82)

101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) 201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGCGCCCGCCCTACCTGAGGCC **PvuII (239)** **Bsu36I (291)**

301 GCCATCCACGCGGTTGAGTGCAGTTCGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

401 GGGCCTTTGTCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTGGCTGACCCTGCTTGTCAACTCTACGCTTTTGTTCGTTT **NgoMIV (441)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGTAGGAGGCCATCATGAACCTTCTGCTGCTTGGTGCATTGG **AgeI (552)** **BspHI (568)**
1 M N F L L S W V H W

601 AGCCTTGCTTGGTCTGCTCTACCTCCACCATGCCAAGTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCA **NcoI (652)** **DraIII (681)**
11 S L A L L Y L H H A K W S Q A A P M A E G G G Q N H H E V V K F

701 TGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTCCAGGAGTACCCTGATGAGATCGAGTACATCTTCAAGCCATCCTG **BsaBI (702)** **BstAPI (715)**
44 M D V Y Q R S Y C H P I E T L V D I F Q E Y P D E I E Y I F K P S C

801 TGTCCCCGTGATGCGATGCGGGGCTGTGCAATGACGAGGGCCTGGAGTGTGTGCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGATCAAA **EcoO109I (838)** **BstAPI (881)**
77 V P L M R C G G C C N D E G L E C V P T E E S N I T M Q I M R I K

901 CCTACCAAGGCCAGCACATAGGAGAGATGAGCTTCTACAGCACAACAAATGTGAATGACACAAAGAAAGATAGAGCAAGACAAGAAAATCCTGTG **BsrBI (1011)** **BsrGI (1031)**
111 P H Q G Q H I G E M S F L Q H N K C E C R P K K D R A R Q E N P C

1001 GGCCTTGCTCAGAGCGGAGAAAGCATTGTTTGTACAAGATCCGACAGCTGTAATGTTCTGCAAAAAACAGACTCGGTTGCAAGGCGAGGCGAGCT **MscI (1152)**
144 G P C S E R R K H L F V Q D P Q T C K C S C K N T D S R C K A R Q L

1101 TGAGTTAAACGAAGCTACTTGCAGATGTACAAGCCGAGCGGTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCAACT **NheI (1146)**
177 E L N E R T C R C D K P R R •

1201 AGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATT **HpaI (1284)** MfeI (1295)

1301 GCATTCATTTTATGTTTCAGGTTACAGGGGAGGTGTTGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAATTCTAAAATACAGCATA **EcoRI (1380)**

1401 GCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGT

1501 TTGCAGCCTCACCTCTTTCATGGAGTTAAGATATAGTGATTTTCCCAAGGTTTGAAGTACTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCC **SapI (1562)**

1601 CACATTCCTTTTTAGTAAAAATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCC **SspI (1619)** **SwaI (1633)** **EcoO109I (1694)**

1701 TTCATAATATCCCCAGTTTAGTAGTTGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGG **SacI (1894)**
141 • N R T

1801 TGTACTTGAGGGGATGAGTTTCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTC **BstXI (1923)**
137 Y K L P I L E 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

1901 TCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCG **StuI (2058)**
104 R C M G C P S V 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

2001 TTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGG **BbsI (2204)**
70 N S V A S G I A 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

2101 TCCTGATGGCCCGCCCGACATGGTGTGTTGTCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTT **XmnI (2200)** **AseI (2266)**
37 R I A A G V H 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
4 F T K M

2201 GAAGTCTTCATGGTGGCCCTCCTATAGTGTGATGCTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCA **SacI (2323)**

2301 GCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACAT

2401 TTTGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCGTGAGTCAAACCGCTATCCACGCC **SpeI (2421)**

2501 CATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTAAGTGGG

SnaBI (2549)

2601 ATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAA

NdeI (2654)

2701 TACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGC

PacI (2840)

PstI (2833) SdaI (2832) BspLU11I (2850)

2801 CAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCG

2901 TTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACC

3001 AGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCT

ApaLI (3164)

3101 TTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTAGCCCGACCGCTGCGCC

3201 TTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAG

3301 GCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAA

3401 AAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAA

PacI (3580) SmaI (3589) NotI (3599)

3501 GAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTATGGCTAGTTAATTAACATTTAAATC AG

EagI (3600)

3601 CGGCCGCAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAAACAAACGAAACAA

3701 AACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA