



PvuI (7)
SgfI (6) 1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA **MfeI (82)**

101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

301 GCCATCCACGCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NaeI (441) 401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

501 TCTGTTCTGCGCGGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGTAGGAGGGCCATCATGAGGAAGGCTGGGCTCTGGGACTGCTG **KasI (535)** **AgeI (552)** **BspHI (568)**
1 M R K A G L W G L L

601 TGGTGTCTTTGTCTCAGAAGTCAAAGCTGCCATTGTTCTAGAGGAAGAAAGTATGACCTAGTGGAGGGCCAGACTTTGACAGTGAAGTGTCCCTTCA **XbaI (638)**
11 C V F F V S E V K A A I V L E E E R Y D L V E G Q T L T V K C P F

701 ACATCATGAAGTATGCCAACAGCCAGAAGGCTTGGCAGAGACTACCAGACGGGAAGGAACCCCTGACCCTGGTGGTACACAGAGGCCCTTTACAAGACC **BspHI (703)** **EcoO109I (783)**
44 N I M K Y A N S Q K A W Q R L P D G K E P L T L V V T Q R P F T R P
801 CAGTGAAGTCCACATGGGGAAGTTCACCTGAAACATGACCCTAGTGGGCGCATGCTACAAGTCAAAGTACTGACCTTCAAGTACAGACTCTGGATTG
77 S E V H M G K F T L K H D P S E A M L Q V Q M T D L Q V T D S G L

901 TATCGTTGTGATTTACCATCTCCGAATGACCCTGTTGTGCTTCCATCCTGTCCGCTGGTGGTACCAAGGGTCTTTCAGATGTGTTCACTCCTG **BstEII (965)**
11 Y R C V I Y H P P N D P V V L F H P V R L V V T K G S S D V F T P

1001 TCATCATTCTATTACAAGGCTGACAGAGCGTCCCATCCTTATTACCACAAAATACTACCCAGTGACACAACATAACCCGATCCCTACCCAAGCCAC **DraIII (1057)**
144 V I I P I T R L T E R P I L I T T K Y S P S D T T T T R S L P K P T

1101 TGGGTTGTTTCTCTCTGGTCTTGGAGTCACTATCATAAATGGGACAGATGCTGACAGTCTCCACATCCAGTGTACTATTTTCAGTCATCTGTGGA **Tth111I (1155)**
177 A V V S S P G L G V T I I N G T D A D S V S T S S V T I S V I C G
1201 CTTCTCAGCAAGAGCCTGGTTTTTCATCATTTATTGTCACAAAGAGGACATTTGGATGACAGAAGTGAAGCTATACAATAGTGACCTTCAGCGGT
211 L L S K S L V F I I L F I V T K R T F G •

MscI (1315)
NheI (1309) 1301 GTCTATTTCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAAC TAGAATGCAGTAAAAAATGCTTTATTTGTGAAATTT

1401 GTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTCAATTTATGTTTCAGGTTTCAGGGGAGGTGTG **HpaI (1447)** **MfeI (1458)**

1501 GGAGGTTTTTAAAGCAAGTAAACCTTACAAATGTGGTATGGAATTTCTAAAATACAGCATGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAA **EcoRI (1543)**
1601 TCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCAATGTGCATTAGCTGTTGTCAGCCTCACCTTCTTCATGGAGTTAAGATATA

1701 GTGTATTTTCCAAGGTTTGAAGTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAATATTCAGAAATAATTT **SspI (1782)** **SwaI (1796)**

1801 AAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGG **EcoO109I (1857)**

1901 AACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTT **SacI (2057)** **BstXI (2086)**
141 • N R T Y K L P I L E E I T T K

2001 GACCAGCTTGCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGACATGCCACAGGGGCTGACCACCTGATGGAT **StuI (2221)**
125 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 S
2101 CTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCAC
91 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 C

2201 AGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTGTCTGTTGCCTC **XmnI (2363)** **BspHI (2371)**
58 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 E

2301 ATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGCCTGTA **AseI (2429)**
25 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

2401 TTATACTATGCCGATATACTATGCCGATGATTAATGTCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACGGTTCACATAAACGAGCTCTGCTTAT **SacI (2486)**

2500 ATAGACCTCCCACGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAA **SpeI (2584)**
2599 ACTCCCATTTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTA

SnaBI (2712)
2699 ATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGT

NdeI (2817)
2799 CAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTAT

PstI (2996)
SdaI (2995)
2899 TGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGCGGTGTCAGCCAGGCGGGCCATTTACCGTAAAGTTATGTAACGCC

PacI (3003) **BspLU11I (3013)**
2998 **TGCAGGTTAA** TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCC
3096 TGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCG
3196 TCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTT

ApaLI (3327)
3296 CGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTGACCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCC
3396 GGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCT
3496 AACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAA
3596 CCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGA

EagI (3763)
PacI (3743) **Swal (3752)** **NotI (3762)**
3696 CGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCCAATAAAATATCTTTATTTTCATTA
3795 CATCTGTGTGTTGGTTTTTTGTGTAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTG
3895 CAAGTGCAGGTGCCAGAACATTTCTCTATCGAA