



100

PvuI (7)
SgfI (6)
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245)
Psp1406I (203) **PvuII (239)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTGTTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441) **NaeI (441)**
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **AgeI (552)**
501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTCATCATGACCTCTAGGAAGAAAGTGTGCTGAAGGTCATCAT
1 M T S R K K V L L K V I I

BsrBI (686)
601 CCTGGGGACTCTGGTGTGGAAAGACCTCTCATGAACAGTATGTGAACAAGAAGTTCAGTAACAGTACAAAGCCACAATAGGAGCGGACTTTCTG
13 L G D S G V G K T S L M N Q Y V N K K F S N Q Y K A T I G A D F L

XcmI (701) **BglII (740)**
701 ACCAAGGAGGTGATGGTGACGACAGACTTGTACCATGCAGATCTGGGACACAGCCGGTCAAGAACGGTTCAGTCTCTTGGTGTGGCCTTCTACAGAG
47 T K E V M V D D R L V T M Q I W D T A G Q E R F Q S L G V A F Y R

PvuII (861) **XmaI (896)**
801 GTGCAGATTGCTGTGTTCTGGTGTGGTGTGACTGCCCAACACTTTCAAACCTCGACAGCTGGAGAGACGAGTTTCTCATCCAGGCCAGCCCCG
80 G A D C C V L V F D V T A P N T F K T L D S W R D E F L I Q A S P R

BamHI (900) **MscI (962)**
901 GGATCCCGAGAACTCCCTTTTGTGTGTTGGGAAACAAGATTGACCTGGAAAACAGACAAGTGGCCACAAGAGGGCACAGGCTTGGTGTACAGCAA
113 D P E N F P F V V L G N K I D L E N R Q V A T K R A Q A W C Y S K
1001 AACAACTTCTTACTTCGAGACCAGTCCAAGGAGGCATCAATGTGGAGCAGGCCCTCCAGACAATTGCTCGGAATGCCCTAAACAGGAAACAGAAG
147 N N I P Y F E T S A K E A I N V E Q A F Q T I A R N A L K Q E T E

EcoRI (1114) **BsrGI (1106)** **PstI (1173)** **NheI (1197)**
1101 TGGAACTGTACAATGAATCCCTGAACCATCAAACCTGGACAAGAATGACCGGGCCAAGGCCCTCCGAGAAAAGCTGCAGTTGTTGAAGGGGCAGTGAGCT
180 V E L Y N E F P E P I K L D K N D R A K A S A E S C S C •

MscI (1203)
1201 AGCTGGCCAGACATGATAAGATACATTGATGAGTTTGACAAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTG

HpaI (1335)
1301 CTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTATTTTTATGTTTCAGGTTACAGGGGAGGTGTGGGAGGTTTTTTA

EcoRI (1431)
1401 AAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAG
1501 GGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTTTCATGGAGTTAAGATATAGTGATTTTCCC

SspI (1670) **SwaI (1684)**
1601 AAGTTTGAAGTACTGCTCTTCATTTCTTTATGTTTTAAATGCAGTACCTCCACATTCCTTTTATGATAAATATTGAGAAATAATTTAAATACATCATT

EcoO109I (1745)
1701 GCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAAATACCCCCAGTTTAGTAGTTGACTTAGGGAACAAAGGAACC
1801 TTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGCTGACTTGGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGGC
141 • N R T Y K L P I L E E I T T K V L K G

SacI (1945)
1901 ATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCA
121 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 R D V E
2001 TCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGCTGCTCACAGCAGACCAATGGCAATGGCTTACAGCACAGACAGTGAACC
87 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 V T V R
2101 TGCCAATGTAGCCCTCAATGTGGACAGCAGAGATGATCTCCAGCTTGTGGTCTGAGGGCGCCCGACATGGTGTGTTGCTCATAGAGCATGGT
54 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 Y L M T

BbsI (2255) **XmnI (2251)**
2201 GATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCC
21 I K E T A V E V L E L D Q Q S I N F T K M

AseI (2317) **SacI (2374)**
2301 GATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACGGTTCATAAACGAGCTCTGCTTATATAGACCTCCCA

SpeI (2472)
2400 CCGTACACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCCATGAC
2499 GTCAATGGGTGGAGACTTGGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACT

2599 **SnaBI (2600)**
AATACGTAGATG TACTGCCAAGTAGGAAAGTCCATAAGGTCATG TACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCG

2699 **NdeI (2705)**
TACTTGGCATATGATACACTTGATG TACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTAT

2799 **PstI (2884)**
SdaI (2883)**PacI (2891)**
GGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGT CAGCCAGGCGGGCCATTTACCGTAAGTTATGTAAC**CCTGCAGGTTAA T**

2897 **BspLU11I (2901)**
TAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC

2997 AAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCCGA

3097 CCTGCGCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGT

3197 **ApaLI (3215)**
TCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTT CAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGAC

3297 TTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACA

3397 CTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAG

3497 CGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAC

3597 **EagI (3651)**
PacI (3631) **SwaI (3640)** **NotI (3650)**
GAAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC **AGCGGCCGAATAAAATATCTTTATTTTCATTACATCTGTGTGTTG**

3696 GTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGC
3796 CAGAACATTTCTCTATCGAA