



PvuI (7)
SgfI (6) 1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
MfeI (82)
101 GAGAAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) **HindIII (245)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACGCGCCCGCCGCTACCTGAGGCC
301 GCCATCCACGCGGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTCCGCCGTCTAGGTAAGTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTACTCACTCTACGCTTTTGTTCGTTT

AgeI (552) **NcoI (568)** **BsrBI (585)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTAGGAGGGCCACCATGGAGAGGGGGTCCGCTCCTCTGCGCC
1 M E R G L P L L C A
Acc65I (679)

EagI (622) **XmaI (675)**
601 GTGCTCGCCCTCGTCTCGCCCCGCGCGCTTTTCGCAACGATAAATGTGGCATACTATAAAAATTGAAAGCCCCGGTACCTTACATCTCCTGGTT
11 V L A L V L A P A G A F R N D K C G D T I K I E S P G Y L T S P G
BspEI (749)

701 ATCCTCATTCTTATCACCAAGTAAAAATGCGAATGGCTGATTCAGGCTCCGGACCCATACCAGAGAATTATGATCAACTTCAACCCTCACTTCGATT
44 Y P H S Y H P S E K C E W L I Q A P D P Y Q R I M I N F N P H F D L
801 GGAGGACAGAGACTGCAAGTATGACTACGTGGAAGTCTTCGATGGAGAAAATGAAATGGACATTTTAGGGGAAAAGTTCTGTGAAAGATAGCCCTCCT
77 E D R D C K Y D Y V E V F D G E N E N G H F R G K F C G K I A P P
DraIII (955)

901 CCTGTTGTCTTTCAGGGCCATTTCTTTTATCAAATTTGCTCTGACTACGAAACACATGGTGCAGGATTTTCCATACGTTATGAAATTTTCAAGAGAG
111 P V V S S G P F L F I K F V S D Y E T H G A G F S I R Y E I F K R
DraIII (1027)

1001 GTCCTGAATGTTCCAGAACTACACAACACCTAGTGGAGTGATAAAGTCCCCGGATTCCCTGAAAAATATCCCAACAGCCTTGAATGCACCTTATATTGT
144 G P E C S Q N Y T T P S G V I K S P G F P E K Y P N S L E C T Y I V
HindIII (1139)

1101 CTTTGGCCAAAGATGTCAGAGATTATCCTGGAATTTGAAAGCTTTGACCTGGAGCCTGACTCAAATCCTCCAGGGGGATGTTCTGTCGCTACGACCGG
177 F A P K M S E I I L E F E S F D L E P D S N P P G G M F C R Y D R
BsaBI (1279)

1201 CTAGAAATCTGGGATGGATTCCCTGATGTTGGCCCTCACATTGGCGTTACTGTGGACAGAAAACACCAGGTGCAATCCGATCCTCATCGGGCATTCTCT
211 L E I W D G F P D V G P H I G R Y C G Q K T P G R I R S S S G I L
NcoI (1300)

1301 CCATGGTTTTTACACCGACAGCGGATAGCAAAAGAAGTTTTCTCAGCAAACACTACAGTGTCTTGCAGAGCAGTGTCTCAGAAGATTTCAAATGTATGGA
244 S M V F Y T D S A I A K E G F S A N Y S V L Q S S V S E D F K C M E
Eco47III (1480)

1401 AGCTCTGGGATGGAATCAGGAGAAATTCATTCTGACCAGATCACAGCTTCTCCAGTATAGCACCAACTGGTCTGCAGAGCGCTCCCGCTGAACTAC
277 A L G M E S G E I H S D Q I T A S S Q Y S T N W S A E R S R L N Y
1501 CCTGAGAATGGGTGGACTCCCGGAGAGGATTCTACCGAGAGTGGATACAGGTAGACTTGGGCTTCTGCGCTTTGTACGGCTGTGGGACACAGGGCG
311 P E N G W T P G E D S Y R E W I Q V D L G L L R F V T A V G T Q G
SspI (1624)

1601 CCATTTCAAAGAAACCAAGAATAATTATGTCAAGACTTACAAGATCGACGTTAGCTCCAACGGGAAGACTGGATCACCATAAAAGAAGGAAACAA
344 A I S K E T K K Y Y V K T Y K I D V S S N G E D W I T I K E G N K
1701 ACCTGTTCTTTTTCAGGAAACACCAACCCACAGATGTTGTGGTTCAGTATTTCCCAAACACTGATAACTCGATTGTCCGAATCAAGCCTGCAACT
377 P V L F Q G N T N P T D V V V A V F P K P L I T R F V R I K P A T
Bst1107I (1830)

1801 TGGGAACTGGCATATCTATGAGATTTGAAGTATACGGTTGCAAGATAACAGATTATCCTTGCTCTGGAATGTTGGGTATGGTGTCTGGACTTATTTCTG
411 W E T G I S M R F E V Y G C K I T D Y P C S G M L G M V S G L I S
BstEII (1961)

1901 ACTCCAGATCACATCATCCAACCAAGGGGACAGAAATGGATGCCTGAAAACATCCGCTGGTAACAGTTCGCTCTGGCTGGCACTTCCACCCGCACC
444 D S Q I T S S N Q G D R N W M P E N I R L V T S R S G W A L P P A P
2001 TCATTCCTACATCAATGAGTGGCTCCAATAGACTGGGGAGGAGAAGTCTGAGGGGCATCATCTCAGGTTGGGAAGCACCCGAGAGAACAAAGGTT
477 H S Y I N E W L Q I D L G E E K I V R G I I I Q G G K H R E N K V
BspHI (2101)

2101 TTCATGAGGAAGTTCAAGATCGGGTACAGCAACAACGGCTCGGACTGGAAGATGATCATGGATGACAGCAAAACGCAAGGCGAAGTCTTTTGGGGCAACA
511 F M R K F K I G Y S N N G S D W K M I M D D S K R K A K S F E G N
2201 ACAACTATGATACACTGAGCTGCGGACTTTCCAGCTCTCTCACGCGATTATCAGGATCTACCCCGAGAGCCACTCATGGCGACTGGGGCTCAG
544 N N Y D T P E L R T F P A L S T R F I R I Y P E R A T H G G L G L R
2301 AATGGAGCTGCTGGGCTGTGAAGTGAAGCCCCACAGCTGGACCGACTCCCAACGGGAAGTGGTGGATGAATGTGATGACGACCAGGCCAACTGC
577 M E L L G C E V E A P T A G P T T P N G N L V D E C D D D Q A N C
BstXI (2440)

2401 CACAGTGGAAACAGGTGATGACTTCCAGCTCACAGGTGGCACCACTGTGCTGGCCACAGAAAAGCCACGGTCCATAGACAGCACCATAAATCAGAGTTTC
611 H S G T G D D F Q L T G G T T V L A T E K P T V I D S T I Q S E F
NdeI (2503) **BbrPI (2571)**

2501 CAACATATGGTTTTAACTGTGAATTTGGCTGGGGCTCTCACAAGACCTTCTGCCACTGGGAACATGACAATCAGTGCAGCTCAAGTGGAGTGTGTTGAC
644 P T Y G F N C E F G W G S H K T F C H W E H D N H V Q L K W S V L T
SandI (2609)

2601 CAGCAAGACGGGACCCATTGAGGATCACACAGGAGATGGCAACTTCATCTATTCCAAGCTGACGAAAATCAGAAGGGCAAAGTGGCTCGCCTGGTGAGC
677 S K T G P I Q D H T G D G N F I Y S Q A D E N Q K G K V A R L V S

5401 CCGGTAACATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGG

5501 TGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGA

5601 GTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAG

5701 ATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGC

EagI (5796)
PacI (5776) SmaI (5785) NotI (5795)

5801 CGCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACA

5901 AACTAGCAAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA