



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

Psp1406I (203) 201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCCTTACGCGCCCGCCGCTACCTGAGGCC **HindIII (245)** **Bsu36I (291)**
301 GCCATCCACGCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTCTCAACTCTACGTCTTTGTTTCGTTT **NgoMIV (441)**

501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGGTACCATTGGCTAGGCCCTTTCCTTCTGATGGTCTTGGTGGT **NcoI (560)** **BstEII (555)** **EcoO109I (568)**
1 M A R P F A F L M V L V V

601 GATAAGCTACTGGTCAACCTGCTCTCTAGGATGTGACCTGCCTCAAACCTATAAACCAGAAAGAAATCTTGACACTCCTGGCACAAATGAGGAGA **Bsu36I (654)**
13 I S Y W S T C S L G C D L P Q T H N L R N K K I L T L L A Q M R R
701 CTCTCCCCTCTCTTGCTGAAGGACAGAAAGACTTTGGATCCCCAGGAGAAGGTGGATGCCAGCAGATCCAGGAGGCTCAAGCCATCCCTGTCC
47 L S P L S C L K D R K D F G F P Q E K V D A Q Q I Q E A Q A I P V
801 TGAGTGAGCTGACCCAGCAGATCCTGACCTCTCACATCAAAGGACTCATCTGCTGTTGGAATGCAACCCTCCTAGACTCATTCTGCACTGGCCTCCA
80 L S E L T Q Q I L T L F T S K D S S A A W N A T L L D S F C T G L H

901 CCAGCTGCTCAATGACCTGCAAGGCTGTCTGATGCAGCTGGTCGGGATGAAGGAACTGCCCTGACCCAGGAAGACTCCAGCTGGCTATGAAGAAATAT **SspI (995)** **XmnI (993)**
113 Q L L N D L Q G C L M Q L V G M K E L P L T Q E D S Q L A M K K Y

1001 TTCCACAGGATCACTGTGTACTGAGAGAGAAGAAACACAGCCCTGTGCTGGGAGGTGGTCAGAGCAGAAGTCTGGAGAGCCCTGTCTTCCTCAGTTA **HpaI (1096)**
147 F H R I T V Y L R E K K H S P C A W E V V R A E V W R A L S S S V

1101 ACTTGCTGGCAAGACTGAGTGAGGAGAAGGAGTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTG **MscI (1141)** **NheI (1135)**
180 N L L A R L S E E K E •

1201 AAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAACATTGCATTATTTT **HpaI (1273)** **MfeI (1284)**

1301 ATGTTTCAGGTTACAGGGGAGGTGTGGGAGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTA **EcoRI (1369)**
1401 ACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTCAGCCTCA

1501 CCTTCTTTCATGGAGTTAAGATATAGTGTATTTCCCAAGGTTTGAAGTCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTT **SapI (1551)**

1601 TTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATC **SspI (1608)** **SwaI (1622)** **EcoO109I (1683)**
1701 CCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGG
141 N R T Y K L

1801 GGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCACTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGC **SacI (1883)**
133 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 R C M G

1901 CACAGGGGCTGACCAACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGC **BstXI (1912)**
100 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 N S V A

2001 AGACCCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGTATGCC **StuI (2047)**
67 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 R I A

2101 GCCCCGACATGGTGTGTTGTCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCTGCTGAGAGATGTTGAAGGTCTTCA **XmnI (2189)**
33 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 F T K M

2201 TGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGAC **AseI (2255)**
0

2301 GGTCACTAAACGAGCTCTGTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTC **SacI (2312)**

2401 CCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAC **SpeI (2410)**

2501 TGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTA CTGACTGGGCATAATGCCAGG
SnaBI (2538)

2601 CGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGTGTA CTGACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCA
NdeI (2643)

2701 TTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGT CAGCCAGGCGGGCCA

2801 TTTACCGTAAGTTATGTAACGCCTGCAGGTTAATAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTT
PacI (2829)
PstI (2822)
SdaI (2821)
BspLU11I (2839)

2901 TTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCC
←

3001 CCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCT

3101 CACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTT CAGCCCGACCGCTGCGCCTTATCCGTAA
ApaLI (3153)

3201 CTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACA

3301 GAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTA

3401 GCTCTTGATCCGGCAAACAACCCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTT

3501 GATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATA
EagI (3589)
PacI (3569) **Swal (3578)** **NotI (3588)**

3601 AAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGC

3701 AAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTATCGAA