



100

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

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA  
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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**Psp1406I (203)**
**HindIII (245)**
**Bsu36I (291)**

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCCGCCGCCCTACCTGAGGGCC  
301 GCCATCCACGCCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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**NgoMIV (441)**  
**NgoMI (441)**  
**NaeI (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

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**PeiI (560)**  
**BspLU11I (560)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCCCTACTCTGAGATCACCGGTCAACATGTCTGGACTGAGTGC GGCTGGAGCTTGCATGGAGCA  
1 M S G L S A A G A C M E H

**DraIII (600)**
**BsaBI (691)**

601 CACAGAGTGTGCTCCACCAAGAAGAAAGACTTGACAAATTCTTTGAACGAAAGATAAAACACTTGGAAAAACAGAGACAAGAGCTCCTGGATGTCAAT  
13 T E C A P P R R K D L T N S L E R K I K H L E K Q R Q E L L D V N

**EcoO109I (749)**

701 CAACAATGGGACCAGCAATTCGAAATATGAAAGAGTTATATGAAAGAAAGGCTCTGGAGCTGAAAACTAAACTGGCGGCCACAGAAAACTCACACCC  
47 Q Q W D Q Q F R N M K E L Y E R K V L E L K T K L A A T E N T H T

**XhoI (844)**
**Bsu36I (864)**

801 TAGTGAAGGAACAGAAGCAAAGTGTGACAGAGGGCGACAGGCAGCTCGAGAAGGAAAAGGACAGCCTAAGGAAAAGAATTACAGGCACTGAAGAAGGAGAA  
80 L V K E Q K Q S V T E G D R Q L E K E K D S L R K E L Q A L K K E N

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**MscI (926)**  
**NsiI (950)**

901 TAAGCTGTTGAAAGAAAAACAACGCTCTGGCCAAACAGAAAGAAAGACATTATGTCATGTGAAATTAACGCCTCAATAAGGTTCTTTCAGGATGCCTTGACC  
113 K L L K E N N A L A N R K K E H Y A C E I K R L N K V L Q D A L T

**XcmI (1096)**

1001 ATTGGGAGCTCTTCGTTTCTGAGGACTCAGGGAAGTGTAAAGGCAGGTGCAGCCATGCAGAGATGAGAAGAGAGGTGGAATGGCACAAGCAGCAGCCAG  
147 I G S S S L S E D S G K C K G R C S H A E M R R E V E W H K Q Q P

**BsrGI (1137)**  
**Eco72I (1133)**  
**BbrPI (1133)**

1101 CCTATCAGTGAATGCTCTCAGCCAGTTCCTCCAGTGACAGCACAAGGCACATGGTTTCTCCTCAGAAAGGAAAACCGACCTGTAGCATTACGTTAG  
180 A Y Q W N A L S Q L P R V Q H K A H G F S S E R K T D L •

**NheI (1218)**

1201 CAGAGAAGAGCAGAGGGTGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTT

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**HpaI (1356)**
**MfeI (1367)**

1301 GTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACCAAGTTAAACAACAACATTGCATTCTTTATGTTTCAGGTTTCAGGG

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**EcoRI (1452)**

1401 GGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCAAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCT  
1501 CTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCCTCACCTTCTTTCATGGAGTT

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**SspI (1691)**

1601 TAAGATATAGTGTATTTTCCAAGGTTTGAAGTGTCTCTTCTTTATGTTTTAAATGCAGTGCCTCCACATTCCCTTTTATGAAAAATTTTCAG

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**SwaI (1705)**
**EcoO109I (1766)**

1701 AAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTG  
1801 GACTTAGGGAACAAAGGAACCTTTAATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCCTCAAT  
141 • N R T Y K L P I L E E I

**BstXI (1995)**

1901 GGTGGTTTTGACCAGCTTGCATTTCATCTCAATGAGCACAAGCAGTCAAGGAGCATAGTCAGAGATGAGTCTCTGCACATGCCACAGGGGCTGACCAC  
128 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 C P S V V  
2001 CTGATGGATCTGCCACCTCATCAGAGTAGGGGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCAATGGCAATGG  
94 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 S G I A I A

**StuI (2130)**  
**Eco147I (2130)**

2101 CTTGACGACAGACAGTGCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTGCTT  
61 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 A G V H H K

**BspHI (2280)**  
**XmnI (2272)**

2201 GTTGCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAG  
28 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

VspI (2338)  
AseI (2338)

2301 TGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGC

SpeI (2493)

2400 TCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAG

2499 TCAAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATC

SnaBI (2621)  
Eco105I (2621)

2599 ATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGT

NdeI (2726)

2699 CATTGACGTCAATAGGGGCGTACTTGGCATATGATACACTTGTACTGTACTGCCAAGTGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAA

2799 AGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTAT

PstI (2905)      PciI (2922)  
SdaI (2904) PacI (2912)      BspLU11I (2922)

2899 GTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTC

2997 CGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCTGGAAGCTCCC

3097 TCGTGCCTCTCTGTTCGACCCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTA

ApaLI (3236)

3197 TCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCCTGCGCCTTATCCGGTAACTATCGTCTTGAG

3297 TCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGT

3397 GGTGGCTAACTACGGCTACACTAGAAGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGG

3497 CAAACAAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACG

EagI (3672)  
PacI (3652)      SmaI (3661)      NotI (3671)

3597 GGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTAT

3696 TTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGT

3796 CCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA