



**PvuI (7)**  
**SgfI (6)**
**MfeI (82)** **EcoNI (96)**

1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA  
 101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCGCTACCTGAGGCC  
 301 GCCATCCACGCGGTTGAGTGCCTTCTGCCGCTCCCGCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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**NgoMIV (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTGGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

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**AgeI (552)**
**BspLUIII (568)**

501 TCTGTTTGTCCGCGCTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTAGGAGGGCCAAACATGCTGGGAGTCAGAGCGAGGTGGCTCCA  
1 M S G S Q S E V A P

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**SacII (612)**
**SmaI (648)**
**XmaI (645)**

601 TCCCCGACAGATCCGCGGAGCCCGAGATGGGACGGGACTTGC GGCCCGGTCCTCGTCTGCTCTGCTCTGCTCTGCTGTTGATCTGACTGACTC  
11 S P Q S P R S P E M G R D L R P G S R V L L L L L L L L V Y L T

**XmnI (754)**
**BspHI (787)** **BspEI**

701 AGCCAGGCAATGGCAACGAGGGCAGCGTCACTGGAAGTTGTTATTGTGGTAAAAGAATTTCTTCCGACTCCCCGCCATCGGTTTCAATCATGAATCGTCT  
44 Q P G N G N E G S V T G S C Y C G K R I S S D S P P S V Q F M N R L

**NcoI (888)**

801 CCGAAACACCTGAGAGCTTACCATCGGTGTCTATACTACACGAGGTTCCAGCTCCTTCTGGAGCGTGTGTGGAAGGCAACAAGGACCCATGGGTTTCA  
77 R K H L R A Y H R C L Y Y T R F Q L L S W S V C G G N K D P W V Q

901 GAATTGATGAGCTGTCTTATCTCAAAGAATGTGGACATGCTTACTCGGGGATTGTGGCCACCAGAAGCATTACTTCTACAGCCCCCAATTTCTC  
111 E L M S C L D L K E C G H A Y S G I V A H Q K H L L P T S P P I S

**StuI (1000)**
**EcoRV (1023)**

1001 AGGCCTCAGAGGGGCGATCTTCCAGATATCCACACCCCTGCCAGATGCTCCTGTCCACCTTGCAGTCCACTCAGCGCCACCCCTCCAGTAGGATCACT  
144 Q A S E G A S S D I H T P A Q M L L S T L Q S T Q R P T L P V G S L

**PvuII (1165)**
**Bsu36I (1173)**

1101 GTCCTCGGACAAAGAGCTCACTCGTCCCAATGAAACCACCATTCACACTGCGGGCCACAGTCTGGCAGCTGGGCTGAGGCTGGGGAGAACCAGAAGCAG  
177 S S D K E L T R P N E T T I H T A G H S L A A G P E A G E N Q K Q

**MscI (1261)**

1201 CCGGAAAAAATGCTGGTCCCACAGCCAGGACATCAGCCACAGTGCAGTCTGTGCCTCTGGCCATCATCTTCATCTCACCGCAGCCCTTCTCTATG  
211 P E K N A G P T A R T S A T V P V L C L L A I I F I L T A A L S Y

**BglIII (1343)**

1301 TGCTGTGCAAGAGGAGGAGGGGGCAGTACCAGTCTCTCCAGATCTGCCGTTTATTATATACCTGTGGCACCTGACTCTAATACCTGAGCCAAGAA  
244 V L C K R R R G Q S P Q S S P D L P V H Y I P V A P D S N T •

**HindIII (1403)**
**NheI (1419)**
**MscI (1425)**

1401 TGAAGCTTGTGAGGAGACCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAACCTAGAATGCAGTAAAAAATGCTTTATT

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**HpaI (1557)**
**MfeI (1568)**

1501 TGTGAAATTTGTGATGCTATTGCTTTATTGTAACCATTATAAGCTGCAATAAAACAAGTTAAACAACAATTGCATTCTTTATGTTTCAGGTTTCAGG

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**EcoRI (1653)**

1601 GGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAATCTAAAATACAGCATAGCAAACTTTAACCTCCAAATCAAGCC  
170 TCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGT

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**SapI (1835)**
**SspI (1892)**

1801 TTAAGATATAGTGATTTTCCCAAGGTTTGAAGTAGCTCTTCACTTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTATGATAAATATTCA

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**SwaI (1906)**

1901 GAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTT

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2001 GGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGGGGGATGAGTTCCTCAA  
141 • N R T Y K L P I L E E I

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**BstXI (2196)**

2101 TGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGACATGCCACAGGGGCTGACCAC  
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

2201 CCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATG  
95 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

**StuI (2331)**

2301 GCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCGACATGGTGTCT  
61 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 A G V H H K

**BbsI (2477)**

**XmnI (2473)**

2401 TGTTGCTCATAGAGCATGGTGTCTTCTCAGTGGGACCTCCACCAGTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCTATA  
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

2501 **AseI (2539)**  
GTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCATAACGAGC

2601 **SpeI (2694)**  
TCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGT

2701  
CAAAACAACTCCATTGACGTCAATGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCA

2801 **SnaBI (2822)**  
TCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTC

2901 **NdeI (2927)**  
ATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAA

3001  
GTCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGGGGGGTCTTTGGGCGGTACGCCAGGCGGGCCATTTACCGTAAGTTATG

3101 **PacI (3113)**  
**PstI (3106)**  
**SdaI (3105)** **BspLU11I (3123)**  
TAACGCCTGCAGGTTAA**TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGC**

3201  
CCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCTGGAAAGCTCCCTCG

3301  
TGGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCAGCTGTAGGTATCT

3401 **ApaLI (3437)**  
CAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCC

3501  
AACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTTCTTGAAGTGGT

3601  
GGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAA

3701  
ACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGG

3801 **EagI (3873)**  
**PacI (3853)** **SwaI (3862)** **NotI (3872)**  
TCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTC

3901  
ATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCC

4001  
AGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA