



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

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA  
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTACACGCGCCCGCCCTACCTGAGGCC  
 301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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**NgoMIV (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTAACTCTACGCTTTTGTTCGTTT

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**SphI (560)**

501 TCTGTTTTCGCGCGTTACAGATCCAAGCTGTGACCGCGGCTACCTGAGATCACCGGTCAGCATGCCAAGAGGAAGGTCAGTCCGCCGAAGGCGCCGC  
1▶ M P K R K V S S A E G A A

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**SapI (604)**

601 CAAGGAAGAGCCCAAGAGGATCGGCGGTTGTGAGCTAAACCTCCTGCAAAAAGTGAAGCGAAGCCGAAAAAGGCAGCAGCGAAGGATAAATCTTCA  
 13▶ K E E P K R R S A R L S A K P P A K V E A K P K K A A A K D K S S  
 701 GACAAAAAAGTGCACAAAAGGAAAAAGGGAGCAAAGGAAAAACAGCCGAAGTGGCTAACCAAGAACTAAAGAAGACTTACCTCGGAAAAACGGGG  
 47▶ D K K V Q T K G K R G A K G K Q A E V A N Q E T K E D L P A E N G

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**AseI (860)** **NheI (897)**

801 AAACGAAGACTGAGGAGAGTCCAGCCTCTGATGAAGCAGGAGAGAAAAGCCAAAGTCTGATTAATAACCATATACCATGTCTTATCAGTGGTCCCTGCT  
 80▶ E T K T E E S P A S D E A G E K E A K S D •

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**MscI (903)**

901 AGCTGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTG

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**HpaI (1035)** **MfeI (1046)**

1001 CTTTATTTGTAACCATTATAAGCTGCAATAAACAGTTAAACAACAACATTGCATTCATTTTATGTTTCAGGTTACAGGGGAGGTGTGGGAGGTTTTTTA

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**EcoRI (1131)**

1101 AAGCAAGTAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAACCTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAG  
 1201 GGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTTCC

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**SapI (1313)**
**SspI (1370)** **SwaI (1384)**

1301 AAGTTTTGAAGTACTGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATT

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**EcoO109I (1445)**

1401 GCAATGAAAATAAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACC  
 1501 TTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCC  
141▶ • N R T Y K L P I L E E I T T K V L K G

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**SacI (1645)** **BstXI (1674)**

1601 ATTACATCTAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCA  
 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  
 1701 TCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTACGACACAGACAGTGAACC  
 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

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**StuI (1809)**

1801 TGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTTGGTCTGATGGCCGCCCGACATGGTGTGTTGCTCCTCATAGAGCATGGT  
 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

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**XmnI (1951)**

1901 GATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGGTGGCCCTCTATAGTGAAGTCTATTATACTATGCC  
 21▶ I K E T A V E V L E L D Q Q S I N F T K M

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**AseI (2017)**
**SacI (2074)**

2001 GATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCAC

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**SpeI (2172)**

2101 CGTACACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGT  
 2201 CAATGGGTTGGAGACTTGGAAATCCCGTGAGTCAAACCCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAA

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**SnaBI (2300)**

2301 TACGTAGTGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCAATTGACGTCAATAGGGGGCGTA

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**NdeI (2405)**

2401 CTTGGCATATGATACACTTGTACTGCAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGG

PacI (2591)  
PstI (2584)  
SdaI (2583)

2501 GAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCATTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAG

BspLU11I (2601)

2601 AACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGCCGCTTGTGGCGTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAA

2701 ATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTCCGACCCT

2801 GCCGCTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCG

ApaLI (2915)

2901 TCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTAT

3001 CGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAG

3101 AAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGT

3201 GGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAA

EagI (3351)

PacI (3331) SmaI (3340) NotI (3350)

3301 ACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTT

3401 TTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAA

3501 CATTCTCTATCGAA