



**PvuI (7)**

**SgfI (6)**

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA  
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

**Psp1406I (203)**

201 GTGAACGTTCTTTTTCGCAACGGGTTTCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTCACGCGCCCGCCGCTACCTGAGGCC  
301 GCCATCCACGCGGGTTGAGTCGCGTTTCCGCCCTCCGCCTGTGGTGCCTCCTGAAGTGCCTCCGCGCTTAGGTAAGTTTAAAGCTCAGGTCGAGACC

**NgoMIV (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT

**AgeI (552)**

501 TCTGTTTGGCGCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTAGGAGGGCCACCATGGTGTTCGATGTGGACACGGAAGAGA  
601 CAAATTTTGTATCTTTTTAAATATGCTCTTAGTTCAGAGTCTTTGGGTTTCGATGGTTTCCTAAAACCTACCTTGTGAAGTAAAGTAAATATCCCAG  
11▶ Q I L I F L N M L L V S R V F G F R W F P K T L P C E V K V N I P  
701 AGGCCATGTGATCGTGGACTGCACAGACAAGCATTGACAGAAATCCCTGAGGGCATTCCACTAACACCACCAATCTTACCCTTACCATCAACCACAT  
44▶ E A H V I V D C T D K H L T E I P E G I P T N T T N L T L T I N H I

**ClaI (849)**

801 ACCAAGCATCTCTCCAGATTCCTCCGTAGGCTGAACCATCTGGAAGAAATCGATTTAAGATGCAATTGTGTACTGTCTACTGGGGTCAAAGCCAAAT  
77▶ P S I S P D S F R R L N H L E E I D L R C N C V P V L L G S K A N  
901 GTGTGTACCAAGAGGCTGCAGATTAGACCTGGAAGCTTTAGTGGACTCTGTACTTAAAGCCCTTTACCTGGATGGAACCAACTTCTGGAGATACCAC  
111▶ V C T K R L Q I R P G S F S G L S D L K A L Y L D G N Q L L E I P  
1001 AGGATCTGCCATCCAGCTTACATCTTCTGAGCCTTGAGGCTAACAAACATCTTCCATCAGGAAGGAGAATCTAACAGAACTGGTCAACATTGAAACACT  
144▶ Q D L P S S L H L L S L E A N N I F S I T K E N L T E L V N I E T L  
1101 CTACCTGGGTCAAACCTGTTATTATCGAAATCCTTGAATGTTTCTATTCTATTGAAAAAGATGCTTTCCTAGTTATGAGAAATTTGAAGTTCTCTCA  
177▶ Y L G Q N C Y Y R N P C N V S Y S I E K D A F L V M R N L K V L S  
1201 CTAAGATAACAATGTACAGCTGTCCCAACCTTTGCCACCTAATTTACTAGAGCTCTATCTTTATAACAATATCATTAAAGAAAATCAAAGAAAATG  
211▶ L K D N N V T A V P T T L P P N L L E L Y L Y N N I I K K I Q E N

**DraIII (1381)**

**BsrGI (1377)**

1301 ATTTTAATAACCTCAATGAGTTGCAAGTCTTGACCTAAGTGGAAATTGCCCTCGATGTTATAATGTCCCATATCCGTGTACACCGTGTGAAAATAATTC  
244▶ D F N N L N E L Q V L D L S G N C P R C Y N V P Y P C T P C E N N S  
1401 CCCCTTACAGATCCATGACAATGCTTTCAATTCATTGACAGAAATTAAGTTTACAGTTTACACAGTAATCTCTTCCAGCATGTGCCCAACATGGTTT  
277▶ P L Q I H D N A F N S L T E L K V L R L H S N S L Q H V P P T W F  
1501 AAAAAATGAGAAACCTCCAGGAAGTACCTCTCCAAAACTACTTGGCCAGAGAAATTTGAGGAGGCCAAATTTTTGCAATTTCTTCCCAACCTTGTG  
311▶ K N M R N L Q E L D L S Q N Y L A R E I E E A K F L H F L P N L V

**NsiI (1639)**

1601 AGTTGGATTTTTCTTTCAATTATGAGCTGCAGGTCTACCATGCATCTATAACTTTACCACATTCACTCTTTCATTGGAAAACCTGAAAATCTGCGTGT  
344▶ E L D F S F N Y E L Q V Y H A S I T L P H S L S S L E N L K I L R V  
1701 CAAGGGGTATGCTTTAAAGAGCTGAAAACCTCCAGTCTTCTGTATTGCACAAGCTTCCAGGCTGGAAGTCTTACCTTGGCACTAATCTCATAAAA  
377▶ K G Y V F K E L K N S S L S V L H K L P R L E V L D L E V L D L E V L P T F I K  
1801 ATTGCTGACCTCAACATATTCAAACATTTTAAAACCTCAAACCTCATAGACCTTTTCAAGTGAATAAGATATCTCCTTCAAGAGAGTCAAGAGAAGTTGGCT  
411▶ I A D L N I F K H F E N L K L I D L S V N K I S P S E E S R E V G

**Bsp120I (1935)**

**StuI (1951)**

1901 TTTGTCCTAATGCTCAAACCTTCTGTAGACCGTCATGGGCCCGAGTCTTGGAGCCTTACACTATTTCCGATACGATGAATATGCACGGAGCTGCAGGTT  
444▶ F C P N A Q T S V D R H G P Q V L E A L H Y F R Y D E Y A R S C R F

**BstXI (2045)**

2001 CAAAAACAAAGAGCCACCTTCTTTCTTGCTTTGAATGCAGACTGCCACATATATGGGCAGACCTTAGACTTAAAGTAGAAATAACATATTTTTTATTTAAA  
477▶ K N K E P P S F L P L N A D C H I Y G Q T L D L S R N N I F F I K  
2101 CCTTCTGATTTTTCAGCATCTTTTCTTCAATGCCTCAACTTATCAGGAAACACCATTGGCCAACTCTTAATGGCAGTGAAGTCTGGCCGTTGAGAG  
511▶ P S D F Q H L S F L K C L N L S G N T I G Q T L N G S E L W P L R

**SapI (2259)**

2201 AGTTGCGTACTTAGACTTCTCCAACAACCGGCTTGATTTACTCTACTCAACAGCCTTTGAAGAGCTCCAGAGTCTTGAAGTCTGGATCTAAGTAGTAA  
544▶ E L R Y L D F S N N R L D L L Y S T A F E E L Q S L E V L D L S S N

**BspHI (2374)**

2301 CAGCCACTATTTTCAAGCAGAAGGAATTAATCAGTGTAACTTTTACCAAGAAATACGGCTTCTGGACAACTCATGATGAATGATAATGACATCTCT  
577▶ S H Y F Q A E G I T H M L N F T K K L R L L D K L M M N D N D I S

**BstBI (2434)**

2401 ACTTCGGCCAGCAGGACCATGAAAGTGACTCTCTCGAATTCGGAGTTCAGAGGCAACCATTTAGATGTTCTATGGAGAGCCGGTGATAACAGATACT  
611▶ T S A S R T M E S D S L R I L E F R G N H L D V L W R A G D N R Y

XmnI (2513)  
2501 TGGACTTCTTCAAGAATTTGTTCAATTTAGAGGTATTAGATATCTCCAGAAATTCCTGAATTCCTTGCCTCCTGAGGTTTTTGAGGGTATGCCGCCAAA  
644▶ L D F F K N L F N L E V L D I S R N S L N S L P P E V F E G M P P N  
2601 TCTAAAGAATCTCTCCTTGGCCAAAAATGGGCTCAAATCTTTCTTTGGGACAGACTCCAGTTACTGAAGCATTGGAAATTTGGACCTCAGCCATAAC  
677▶ L K N L S L A K N G L K S F F W D R L Q L L K H L E I L D L S H N  
SspI (2791)  
2701 CAGCTGACAAAAGTACCTGAGAGATTGGCCAACTGTTCCAAAAGTCTCACAACTGATTCTTAAGCATAATCAAATCAGGCAATTGACAAAATATTTTC  
711▶ Q L T K V P E R L A N C S K S L T T L I L K H N Q I R Q L T K Y F  
BbsI (2861)  
2801 TAGAAGATGCTTTGCAATTGCGCTATCTAGACATCAGTTCAAATAAAATCCAGGTCATTGAGAAGACTAGCTCCAGAAAATGCCTCAACAATCTGGA  
744▶ L E D A L Q L R Y L D I S S N K I Q V I Q K T S F P E N V L N N L E  
HpaI (2964)  
2901 GATGTTGGTTTTACATCACAAATCGCTTTCTTTGCAACTGTGATGCTGTGTGGTTTGTCTGGTGGGTTAACCATACAGATGTTACTATTCCATACCTGGCC  
777▶ M L V L H H N R F L C N C D A V W F V W W V N H T D V T I P Y L A  
Bst1107I (3062) BglIII (3077)  
3001 ACTGATGTGACTTGTGTAGGTCCAGGAGCACACAAAGGTCAAAGTGTGATATCCCTTGATCTGTATACGTGTGAGTTAGATCTCACAAACCTGATTCTGT  
811▶ T D V T C V G P G A H K G Q S V I S L D L Y T C E L D L T N L I L  
3101 TCTCAGTTTCCATATCATCAGTCCCTCTTTCTTATGGTAGTTATGACAACAAGTACCTTTTTCTGGGATGTGGTACATTATTATTTTTGGAAAGC  
844▶ F S V S I S S V L F L M V V M T T S H L F F W D M W Y I Y Y F W K A  
BamHI (3240) NdeI (3280)  
3201 AAAGATAAAGGGGTATCAGCATCTGCAATCCATGGAGTCTGGATCCTATCCCTATGATGTGCCAGACTATGCTGGCTATCCATATGATTTCTGATTAT  
877▶ K I K G Y Q H L Q S M E S G S Y P Y D V P D Y A G Y P Y D V P D Y  
NheI (3337)  
3301 GCTGGATACCCTTATGATGTGCCAGACTATGCCTAAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAG  
911▶ A G Y P Y D V P D Y A •  
HpaI (3475)  
3401 TGAAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAGTTAACACAACAATTGCATTCATT  
3501 TTATGTTTCAGGTTACAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTT  
3601 TAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCT  
SapI (3753)  
3701 CACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGTTTGAAGTACTGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCACATTCCC  
SspI (3810) SmaI (3824)  
3801 TTTTTAGTAAAATATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATA  
3901 TCCCCAGTTTAGTAGTTGGACTTAGGGAAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCAGCTTCTAGCTTTAGTTCTCTGGTGTACTTGA  
4001 GGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACAT  
134▶ 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  
BstXI (4114)  
4101 GCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACA  
101▶ G 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  
StuI (4249)  
4201 GCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGGTCTGATGG  
67▶ A 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  
BspHI (4399)  
BbsI (4395)  
XmnI (4391)  
4301 CCGCCCCGACATGGTGCTTGTGCTCATAGAGCATGGTGATCTTCTCAGTGGCAGCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTT  
34▶ 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  
AseI (4457)  
4401 CATGATGGCCCTCCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTG  
1▶ M  
4501 ACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGAAAG  
SpeI (4612)  
4601 TCCCGTTGATTTACTAGTCAAAAACAACTCCCATGACGTCAATGGGGTGGAGACTTGAAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGT  
SnaBI (4740)  
4701 ACTGCCAAAACCGCATCATCATGTAATAGCGATGACTAATACGTAGATGTAAGTCCCAAGTAGAAAAGTCCATAAGGTCATGTACTGGGCATAATGCCA

