



**Sgfl (11)** **EcoRI (16)**  
1 GGATCTGCGATCGCTGAATTC**GGGGACTTTC**ACTGGGGACTTTCCACT**GGGGACTTTC**ACTGGGGACTTTCCACT**GGGGACTTTC**ACT**CCTGCAGC**

101 **AGTGGATATTTCC**CAGAAA**ACTTTTTGGATGCAGTTGGGGATTTCCTCTTTACTGGATGTGGACAATATCTCTCTATTATTCACAGGAAGCAATCCCTCCT**

**HindIII (256)** **NcoI (283)**  
201 **ATAAAAGGGCCTCAGCAGAAGTAGTGTTCAGCTGTTCTTGGCTGACTTCACATCAAAGCTTCTATACTGACCTGAGACAGAGC**CATGGTTCTGGGGCCCT  
1 M V L G P  
301 GCATGCTGCTGCTGCTGCTGCTGCTGGGCTGAGGCTACAGCTCTCCCTGGGCATCATCCAGTTGAGGAGGAGAACCCGGACTTCTGGAACCGCAGGC  
6 C M L L L L L L L L L L L G L R L Q L S L G I I P V E E E N P D F W N R E A  
401 AGCCGAGGCCCTGGGTGCCGCAAGAAGCTGCAGCCTGCACAGACAGCCGCAAGAACCTCATCATCTTCTGGGCGATGGGATGGGGGTGTCTACGGTG  
39 A E A L G A A K K L Q P A Q T A A K N L I I F L G D G M G V S T V  
**BamHI (511)** **NdeI (578)**  
501 ACAGTGCAGGATCCTAAAAGGGCAGAAGAAGGACAAACTGGGGCTGAGATACCCCTGGCTATGGACCGCTTCCATATGTGGCTCTGTCCAAGACAT  
73 T A A R I L K G Q K K D K L G P E I P L A M D R F P Y V A L S K T  
601 ACAATGTAGACAAACATGTGCCAGACAGTGGAGCCACAGCCACGGCCTACCTGTGCGGGTCAAGGGCAACTTCCAGACCATTTGGCTGAGTGCAGCCGC  
106 Y N V D K H V P D S G A T A T A Y L C G V K G N F Q T I G L S A A A  
**BstEII (788)**  
701 CCGCTTTAACCAGTGAACACGACACGCGGCAACGAGGTCATCTCCGTGATGAATCGGGCCAAGAAAGCAGGGAAGTCAGTGGGAGTGGAACCAACACA  
139 R F N Q C N T T R G N E V I S V M N R A K K A G K S V G V V T T T  
801 CGAGTGCAGCAGCCCTCGCCAGCCGGCACCTACGCCACCGTGAACCGCAACTGGTACTCGGACGCCGACGTGCCTGCCTCGGCCCGCCAGGAGGGGT  
173 R V Q H A S P A G T Y A H T V N R N W Y S D A D V P A S A R Q E G  
901 GCCAGGACATCGCTACGCACTCATCTCCAACATGGACATTGATGATCCTGGGTGGAGGCCGAAAGTACATGTTTCGCATGGGAACCCCAAGCCCTGA  
206 C Q D I A T Q L I S N M D I D V I L G G G R K Y M F R M G T P D P E  
1001 GTACCCAGATGACTACAGCAAGGTGGGACCAGGCTGGACGGGAAGAATCTGGTGCAGGAATGGTGGCGAAGCGCCAGGGTGCCTGGTATGTGTGGAAC  
239 Y P D D Y S Q G G T R L D G K N L V Q E W L A K R Q G A R Y V W N  
1101 CGCACTGAGCTCATGCAGGCTTCCCTGGACCCGTCTGTGACCCATCTCATGGGTCTCTTTGAGCCTGGAGACATGAAATACGAGATCCACCGAGACTCCA  
273 R T E L M Q A S L D P S V T H L M G L F E P G D M K Y E I H R D S  
1201 CACTGGACCCCTCCCTGATGGAGATGACAGAGGCTGCCCTGCCCTGCTGAGCAGGAACCCCGCGGCTTCTCCTCTTCTGTGGAGGTGGTGCATCGA  
306 T L D P S L M E M T E A A L R L L S R N P R G F F L F V E G G R I D  
1301 CCACGGTCATCACGAAAGCAGGGCTTACCGGGCACTGACTGAGACGATCATGTTGACGACGCCATTGAGAGGGCGGGCCAGCTCACAGCAGGAGGAGAC  
339 H G H H E S R A Y R A L T E T I M F D D A I E R A G Q L T S E E D  
1401 ACGCTGAGCCTCGTCACTGCCGACCACTCCACGTCTTCTCCTCGGAGGCTACCCCTCGGAGGGAGCTCCATCTTGGGCTGGCCCTGGCAAGGCC  
373 T L S L V T A D H S H V F S F G G Y P L R G S S I F G L A P G K A  
**StuI (1512)**  
1501 GGGACAGGAAGGCTACACGGTCTCCTATACGAAACGGTCCAGGCTATGTGCTCAAGGACGGCCCGCCGGATGTTACCAGAGCGAGAGCGGGAG  
406 R D R K A Y T V L L Y G N G P G Y V L K D G A R P D V T E S E S G S  
1601 CCCGAGTATCGGAGCAGTGCAGTGCCTGGACGAAGAGACCCACGAGCGAGGACGTGGCGGTGTTGCGCGCGGCCCGCAGGCGCACCTGGTT  
439 P E Y R Q Q S A V P L D E E T H A G E D V A V F A R G P Q A H L V  
1701 CACGGCGTGCAGGAGCAGACCTTATAGCGACGTATGGCCTTCCCGCCTGCTGGAGCCCTACACCGCTGCGACCTGGCGCCCCCGCGGCACCA  
473 H G V Q E Q T F I A H V M A F A A C L E P Y T A C D L A P P A G T  
**NheI (1849)**  
1801 CCGACCCGCGCACCCGGGGCGGTCCCGTCCAAGCGTCTGGATTGAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCAAA  
506 T D A A H P G R S R S K R L D •  
**HpaI (1989)**  
1901 CTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAAACAAGTAAACAACAACA

**EcoRI (2083)**  
2001 TTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCA  
2101 TAGCAAACTTTAACCTCAAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCT  
2201 GTTTCAGCCTCACCTTCTTTTATGAGTAAAGATATAGTGTATTTCCCAAGTGTGAAGTACTGCTTTCATTTCTTTATGTTTTAAATGCACTGACCT  
2301 CCCACATTCCTTTTATGATAAATATTAGAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGC  
2401 CCTTCATAATATCCCCAGTTTGTAGTGTGGACTTAGGGAACAAGGAACCTTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCT  
141 • N R  
2501 GGTGACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGTTCGCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGC  
138 T Y K L 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  
2601 TCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCC  
104 E R C M 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  
**StuI (2763)**  
2701 CGTTGCTCACAGCAGACCAATGGCAATGGCTTCCAGCAGACAGTACCCTGCCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTT  
71 N S V 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

2801 GGCCTGATGGCCGCCCCGACATGGTGCTTGTTGTCTCATAGAGCATGGTGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATG  
38 T R I A 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  
AseI (2970)  
2901 TTGAAGTCTTCATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAACTACTGTTTGTAGGCGCCGG  
4 N F T K M  
3001 TCACAGCTTGATCTGTAACGGCGCAGAACAGAAAACGAAACAAAGACGTAGAGTTGAGCAAGCAGGGTCAGGCAAAGCGTGGAGAGCCGGCTGAGTCTA  
3101 GGTAGGCTCCAAGGGAGCGCCGACAAAGGCCGGTCTCGACCTGAGCTTTAAACTTACCTAGACGGCGGACGCAGTTCAGGAGGCACCACAGGCGGGAG  
HindIII (3283)  
3201 GCGGCAGAACCGGACTCAACCGCGTGGATGGCGGCCTCAGGTAGGGCGGGCGCGTGAAGGAGAGATGCGAGCCCTCGAAGCTTCAGCTGTGTCT  
Psp1406I (3326)  
3301 GCGGCAAACCCGTTGCGAAAAAGAAGTTCACGGCGACTACTGCACTTATATACGGTCTCCCCACCCTCGGAAAAAGCGGAGCCAGTACACGACA  
AgeI (3439)  
3401 TCACTTTCCAGTTTACCCCGCCACCTTCTTAGGCACCGTTCAATTGCCGACCCTCCCCCAACTTCTCGGGACTGTGGCGATGTGCGCTCTG  
SpeI (3508)  
3501 CCCACTGACTAGTGGCCCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTCTGGCGTTTTTC  
3601 CATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTCCCCCTG  
3701 GAAGTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCAG  
3801 CTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCCTGCGCTTATCCGGTAACTAT  
3901 CGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGT  
4001 TCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTC  
4101 TTGATCCGGCAAACAACCACCGCTGGTAGCGGTGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATC  
NotI (4286)  
4201 TTTTCTACGGGTCTGACGCTCAGTGAACGAAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAAT  
4301 ATCTTTATTTTATTACATCTGTGTGTTGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAA  
4401 TAGGCTGTCCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA