



**EcoRI (23) SdaI (38)**  
**NotI (2) XbaI (19) BamHI (29)**  
1 CGGCGCGCTCGACGATATCTAGAATTCGGATCCTGCAGGTTACCGCGGAAACGGTCTCGGGGTGAGAGGTCACCCGAAGGACAGGCAGCTGCTGAACC

**Eco47III (112)**  
101 AATAGGACCAGCGCTCAGGCGGATGCTGCCTCTCATTGGTGGCCGTTAAGAATGACCAAGTACCAATGAGTCAGCCCGGGGGCGTAGCAATGACGTGA

**BstBI (219)**  
201 GTTGCGGAGGAGCGCTTCGAATCGGCAGCAGCCAGCTTGGTGGCATGGACCAATCAGCGGCCTCCAACGAGTAGCGACTTCACCAATCGGAGGCTCC  
301 ACGACGGGGCTGTGGGAGGGTATATAAGCGAGTCGGCGACGGCGCTCGATACTGGCCGAGACAACACTGACCTGGACACTTGGGCTTCTGCGTGTG

**SacII (417)**  
401 TGTGAGGTAAGCGCGCGGCTGTCTAGGCCTGCTCCGAGTCTGCTTCTGCTCTCTCTGACCCCGAGGCCCTGTGCGCCTCAGACCAGAACCCTC

**NeoI (583)**  
501 GTCGCGTTTCGGGGCCACAGCCTGTTGCTGGACTCCTAAGACTCCTGCTGACTGCTGAGCGACTGGTCTCAGCGCCGGCACATGGAAATCAAGGTGC  
1 M E I K V

**BglII (698)**  
601 T G T T T G C C C T C A T C T G T A T T G C T G T T G C T G A G G C A A A A C C C A C T G A A A T C A A T G A A G A C C T C A A T A T A G C T G C T G T G G C C T C C A A C T T T G C C A C C A G A  
6 L F A L I C I A V A E A K P T E I N E D L N I A A V A S N F A T T D  
701 T C T T G A G A C T G A C C T G T T C A C C A A C T G G G A G A C C A T G A A T G T A T T A G C A C T G A C A C A G A G C A G G T G A A C A C A G A T G C T G A C A G G G C A A G C T G C C T G G C  
39 L E T D L F T N W E T M N V I S T D T E Q V N T D A D R G K L P G  
801 A A A A A C T C C C C C A G A T G T C C T G A G G G A G C T G G A G G C C A A T G C C A G A A G G G C T G G T T G C A C A A G A G G C T G C C T C A T T T G C C T C C C C A T T A A G T G C A  
73 K K L P P D V L R E L L E A N A R R A A G C T R G C L I C L S H I K C  
901 C C C T A A G A T G A A G A A A T T T A C C T G G C A G G T G C C A C A C T T A T G A A G G T G A A A A G G A G T C T G C T C A G G G A G G A T T G G A G A G G C A A T T G T T G A T A T C C C  
106 T P K M K K F I P G R C H T Y E G E K E S A Q G G I G E A I V D I P  
1001 A G A T T C C T G G C T T C A A G G A T A A G G A G C C A C T G G A C C A G T T T A T T G C T C A A G T G G A C C T C T G T G C T G A T T G C A C C A C T G G C T G T C T G A A G G C C T T G C C  
139 E I P G F K D K E P L D Q F I A Q V D L C A D C T T G C L K G L A  
1101 A A T G T C C A G T G C T C T G A C C T C T G A A G A A G T G G C T T C C C C A G A G G T A C C A C T T T T G C C A G A A G A T T C A G G T A G G T G G A C A A A A T C A A G G G T C T G G  
173 N V Q C S D L L K K W L P Q R C T T F A S K I Q G R V D K I K G L

**NheI (1217)**  
1201 C T G G G G C A G A T G A T A G C T G C C A G A C A T G A T A A G A T A C A T T G A T G A G T T T G G C A A A C C A C A C T A G A A T G C A G T G A A A A A A T G C T T T A T T T G T  
206 A G D R •  
1301 G A A T T T G T G A T G C T A T T G C T T T A T T T G T A A C C A T T A A G C T G C A A T A A C A A G T T A A C A A C A A C A A T T G C A T T C A T T T T A T G T T C A G G T T C A G G G G  
1401 A G G T G T G G G A G G T T T T T A A A G C A A G T A A A C C T C T A C A A A T G T G G T A T G G A A T T A A T T C T A A A A T A C A G C A T A G C A A A C T T T A A C C T C C A A A T C A A G C  
1501 C T C T A C T T G A A T C C T T T T C T G A G G G A T G A A T A A G C A T A G G C A T C A G G G G C T G T T G C C A A T G T G C A T T A G C T G T T T G C A G C C T C A C C T T C T T T C A T G G A G  
SspI (1696)  
1601 T T T A A G A T A T A G T G A T T T T C C C A A G G T T T G A A C T A G C T C T T C A T T T C T T A T G T T T T A A A T G C A C T G A C C T C C C A C A T T C C C T T T T A G T A A A A T A T T C  
1701 A G A A A T A A T T T A A A T A C A T C A T T G C A A T G A A A A T A A A T G T T T T T A T T A G G C A G A A T C C A G A T G C T C A A G G C C T T C A T A A T A T C C C C A G T T T A G T A G T  
1801 T G G A C T A G G G A C A A A G G A A C C T T T A A T A G A A A T T G G A C A G C A A G A A A G C G A G C T T C T A G C T T A T C C T C A G T C C T G C T C C T G C C A C A A A G T G C A C G C  
125 • D Q E E A V F H V C  
1901 A G T T G C C G G C G G G T C G C G C A G G G C G A A C T C C C G C C C C A C G G C T G C T C G C G A T C T C G G T C A T G G C G G C C C G A G G C G T C C C G G A A G T T C G T G G A C A C  
114 N G A P D R L A F E R G W P Q E G I E T M A P G S A D R F N T S V  
2001 G A C T C C G A C C A C T C G G C G T A C A G C T C G T C C A G G C C G C A C C C A C C C A G G C C A G G G T G T T G T C C G G C A C C A C T G G T C C T G G A C C G C G C T G A T G A A C  
81 V E S W E A Y L E D L G R V W V W A L T N D P V V Q D Q V A S I F

**SgrAI (2124)**  
2101 A G G G T C A C G T C G T C C C G A C C A C C G G C G A A G T C G T C C T C C A C G A A G T C C C G G G A G A A C C G A G C C G G T C G G T C C A G A A C T G A C C G C T C C G G C A C G T  
47 L T V D D R V V G A F D D E V F D R S F G L R D T W F E V A G A V D  
2201 C G C G C G G T G A G C A C C G G A A C G G C A C T G G T C A A C T T G G C C A T G A T G G C T C C T C T G T C A G G A G A G A A G A A G G T T A G T A C A A T T G C T A T A G T G  
14 R A T L V P V A S T L K A M  
2301 A G T T G A T T A T A C T A T G C A G A T A C T A T G C C A A T G A T T A A T T G T C A A A C T A G G G C T G C A G G T T A A T T A A G A A C A T G T G A G C A A A A G G C C A G C A A A A G C C  
2401 C A G G A A C C G T A A A A A G G C C G T T G C T G G C G T T T T T C C A T A G G C T C C G C C C C T G A C G A G C A T C A C A A A A T C G A C G C T C A A G T C A G A G G T G G C G A A A C  
2501 C C G A C A G G A C T A T A A G A T A C C A G G C G T T T C C C C T G G A A G C T C C C T C G T G C G C T C C T G T T C C G A C C T G C C G C T T A C C G G A T A C C T G T C C G C T T T C  
2601 T C C T T C G G G A A G C G T G G C G T T T C T C A T A G C T A C G C T G T A G G T A T C T C A G T T C G G T G A G G T C G T T C G C T C A A G C T G G G C T G T G T G C A C G A A C C C C  
2701 C G T T C A G C C C G A C C G C T G C G C T T A T C G G T A A C T A T C G T C T T G A G T C C A C C C G G T A A G A C A C A C T T A T C G C C A C T G G C A G C A G C C A C T G G T A A C A G G  
2801 A T T A G C A G A G C G A G G T A T G T A G G C G G T G C T A C A G A T T C T T G A A G T G G T G G C C T A A C T A C G G C T A C A C T A G A A G A A C A G T A T T T G G T A T C T G C G C T C T G C  
2901 T G A A G C C A G T T A C C T T C G A A A A A G A G T T G G T A G C T T T G A T C C G G C A A C A A C C A C C G C T G G T A G C G G T G G T T T T T T T G T T G C A A G C A G C A G A T T A C  
3001 G C G C A G A A A A A A G G A T C T C A A G A A G A T C C T T T G A T C T T T T C T A C G G G T C T G A C G C T C A G T G G A A C G A A A A C T C A C G T T A A G G G A T T T T G G T C A T G G C T  
3101 A G T T A A T T A A C A T T T A A A T C A