



Sgfl (11) **EcoRI (16)**
1 GGATCTGCGATCGCTGAATTC**TGGGGACTTTCCACTGGGGACTTTCCACTGGGGACTTTCCACTGGGGACTTTCCACTCCTG**CAGC
101 AGTGGATATTTCCAGAAA**ACTTTTTGGATGCAGTTGGGGATTTCCTCTTTACTGGATGTGGACAATATCCTCTATTATTCACAGGAAGCAATCCCTCCT**

HindIII (256) **NcoI (283)**
201 ATAAAAGGGCCTCAGCAGAA**GTAGTGTTCAGCTGTTCTTGGCTGACTTCACATCAAAGCTTCTATACTGACCTGAGACAGAGCCATGGAGGATGCCAAGA**
301 ATATTAAGAAAGGCCCTGCC**CCATTCTACCCTCTGGAAGATGGCACTGCTGGTGAGCAACTGCACAAGGCCATGAAGAGGTATGCCCTGGTCCCTGGCAC**
6N I K K G P A P F Y P L E D G T A G E Q L H K A M K R Y A L V P G T
401 CATTGCCTTCACTGATGCTCACATTGAGGTGGACATCACCTATGCTGAATACTTTGAGATGCTGTGAGGCTGGCAGAA**GGCCATGAAAAGATATGGACTG**
39 I A F T D A H I E V D I T Y A E Y F E M S V R L A E A M K R Y G L
501 AACACCAACCACAGGATTGTGGTGTGCTCTGAGAACTCTCCAGTCTTCATGCCTGTGTTAGGAGCCCTGTT**CATTGGAGTGGCTGTGCCCTGCCA**
73 N T N H R I V V C S E N S L Q F F M P V L G A L F I G V A V A P A
SacI (625)
601 ATGACATCTACAATGAGAGAGACTCCTGAACAGCATGGGCATCAGCCAGCCA**ACTGTGGTCTTTGTGAGCAAGAAGGGCCTGCAAAAAGATCCTGAATGT**
106 N D I Y N E R E L L N S M G I S Q P T V V F V S K K G L Q K I L N V
701 GCAGAAGAAGCTGCCATCATCCAGAAGATCATCATCATGGACAGCAAGACTGACTACCAGGGCTTCCAGAGCATGTATAC**TTTTGTGACCAGCCACTTA**
139 Q K K L P I I Q K I I I M D S K T D Y Q G F Q S M Y T F V T S H L
801 CCCCTGGCTTCAATGAGTATGACTTTGTGCCTGAGAGCTTTGACAGGGACAAGACCATTGCTCTGATTATGAACAGCTCTGGCTCCACTGGACTGCCA
173 P P G F N E Y D F V P E S F D R D K T I A L I M N S S G S T G L P
901 AAGGTGTGGCTCTGCCCCACAGA**ACTGCTTGTGTGAGATTGAGCCATGCCAGAGACCCCATCTTTGGCAACCATGATCATCCCTGACACTGCCATCCTGTC**
206 K G V A L P H R T A C V R F S H A R D P I F G N Q I I P D T A I L S
Acc65I (1045)
1001 TGTGGTCCATTCCATCATGGCTTTGGCATGTTCA**CAACTGGGGTACCTGATCTGTGGCTTCCAGAGTGGTCTGATGTATAGGTTTGGAGGAGCTG**
239 V V P F H H G F G M F T T L G Y L I C G F R V V L M Y R F E E E L
1101 TTTCTGAGGAGCCTACAAGACTACAAGATCCAGTCTGCCCTGCTGGTCCCACTCTGTT**CAGCTTCTTTGCCAAGAGCACCCCTATTGACAAGTATGACC**
273 F L R S L Q D Y K I Q S A L L V P T L F S F F A K S T L I D K Y D
1201 TGAGCAACTGCATGAGATTGCCTCTGGAGGAGCACCCCTGAGCAAGGAGGTGGTGGAGCTGTGGCAAGAGGTTCCATCTCCAGGAATCAGACAGGG
306 L S N L H E I A S G G A P L S K E V G E A V A K R F H L P G I R Q G
1301 CTATGGCCTGACTGAGACCACCTCTGCCATCCTCATACCCCTGAAGGAGATGACAAGCCTGGTGTGTTGGGCAAGTGGTCCCTTTTTTGGAGCCAAG
339 Y G L T E T T S A I L I T P E G D D K P G A V G K V V P F F E A K
1401 GTGGTGGACCTGGACACTGGCAAGACCCTGGGAGTGAACCAGAGGGGTGAGCTGTGTGTGAGGGTCCATGATCATGTCTGGCTATGTGAACAACCTG
373 V V D L D T G K T L G V N Q R G E L C V R G P M I M S G Y V N N P
1501 AGGCCACCAATGCCCTGATTGACAAGGATGGCTGGCTGCACTCTGGT**GACATTGCCTACTGGGATGAGGATGAGCACTTTTTATTGTGGACAGGCTGAA**
406 E A T N A L I D K D G W L H S G D I A Y W D E D E H F F I V D R L K
1601 GAGCCTCATCAAGTACAAGGCTACCAAGTGGCACCTGCTGAGCTAGAGAGCATCTGCTCCAGCACCCCAACATCTTTGATGCTGGTGTGGCTGGCCTG
439 S L I K Y K G Y Q V A P A E L E S I L L Q H P N I F D A G V A G L
BstEII (1799)
1701 CCTGATGATGATGCTGGAGAGCTGCCTGCTGCTGTTGTGGTCTG**GAGCATGGAAAGACCATGACTGAGAAGGAGATTGTGGACTATGTGCCAGTCAGG**
473 P D D D A G E L P A A V V V L E H G K T M T E K E I V D Y V A S Q
1801 TGACCACTGCCAAGAAGCTGAGGGGAGGTGGTGGTGGTGGATGAGGTGCCAAAGGGTCTGACTGGCAAGCTGGATGCCAGAAAGATCAGAGAGATCCT
506 V T T A K K L R G G V V F V D E V P K G L T G K L D A R K I R E I L
NheI (1944)
1901 GATCAAGGCCAAGAAGGGTGGCAAAATTGCTGTGTA**AACTGAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGCAAAACCACA**ACTAGA
539 I K A K K G G K I A V
HpaI (2084)
2001 ATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAA**CAAGTTAACAAACA**CAATTGCA
EcoRI (2178)
2101 TTCATTTTATGTTTCAGGTT**CAGGGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTTCAAATACAGCATAGCA**
2201 AAACTTTAACTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTG
2301 CAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTCCCAAGTTTGA**ACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCAC**
2401 ATTCCCTTTTTAGTAAAATATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTC
2501 ATAATATCCCCAGTTTAGTAGTTGGACTTAGGAACAAAGGAACCTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTCAGGTTTAAAGCTCC
2601 AGGCTTCTTGTGCATGCACCAAGTTCTTGGCCTTCTGGAACCTCAACATCAGCTGT**CACAGTGAATCCCAGTCTTTCATAAAAAGGCAGGTTTCTGGGA**
197 P K R T M C W T R P G E P V E V D A T V T F G L R E Y F P L N R P
2701 GCAGAAGTTTCCAGAAAGGCAGGA**ACTCCAGCCCTTTCAGCAGCTTCAACTCCAGGCAGAACAACAGCAGATCCAGACCTTTCCCTGGTGGTCAGGGC**
163 A S T E L F A P V G A R E A A E V G P L V V A S G L G K G Q H D P S

2801 TCACTCCAACAGTTGCCAGAAACCAAGCTGGCTCTTTTGGCCTGTGTGGTGCCAGCAGACCTTCCATTTGTTGTTGTGCTGCCAGCCTGCTTCCAGAGAG
 130 V G V T A L F W A P E K P R H P A L L G E M Q Q Q A A L R S G S L
 2901 CTCAGCCATTCTGGTCCAATTTAGCAAAAAACAGCACCAGCTTCAACAGACTCAGGTGTTGTCCAACTGCAACAGCAGCTCCATCATCTGCAACCCAA
 97 E A M R P G I E A F V A G A E V S E P T T W V A V A A G D D A V W
 3001 ACTTTTCCAATGTCCAGTCCCACTCTGGTGAGGAAGAGTTCTTGCAGTTCTGTACCCTCTCAATGTGCCTGTGAGGGTCAACTGTGTGCTTGTGTCAG
 63 V K G I D L G V R T L F L E Q L E T V R E I H R D P D V T H R T A P
 3101 GGTAGTCTGAAAAGCAGCAGCCAGTGTCTCACAGCTCTTGAACATCATCTCTGGTTGCCAGCCTCACTGTGGGTTTGTACTCAGTCATGGTGGCCCT
 30 Y D A F A A A L T R V A R P V D D R T A L R V T P K Y E T M ←

AseI (3247)

3201 CCTATAGTGAGTCGATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAACTACTGTTTGTAGGCCCGGTACAGCTTGATCTGTAACGGC
 3301 GCAGAACAGAAAACGAAACAAAGACGTAGAGTTGAGCAAGCAGGGTCAGGCAAAGCGTGGAGAGCCGGCTGAGTCTAGGTAGGCTCCAAGGGAGCGCCGG
 3401 ACAAAAGGCCCGGTCTCGACCTGAGCTTTAAACTTACCTAGACGGCGGACGCAGTTGAGGAGCACCACAGGCCGGGAGGCGGAGAACGCGACTCAACCGG

HindIII (3560)

3501 CGTGGATGGCGGCTCAGGTAGGGCGGCGGCGCTGAAGGAGAGATGCGAGCCCTCGAAGCTTCAGCTGTGTTCTGGCGCAAACCGTTGCGAAAAA
Psp1406I (3603)
 3601 GAACGTTACGGCGACTACTGCACTTATATACGTTCTCCCCACCCTCGGGAAAAGGCGGAGCCAGTACACGACATCACTTCCAGTTTACCCCGG

AgeI (3716)

3701 CCACCTTCTCTAGGCACCGTTCAATTGCCGACCCCTCCCCCAACTTCTCGGGGACTGTGGCGATGTGCGCTCTGCCCACTGACTAGTGGGCCCTGCA

SpeI (3785)

BspLU11I (3813)

3801 GGTTAATTAAGAACATGTGAGCAAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGA
 3901 GCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCCT
 4001 GTTCCGACCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCCGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGT
 4101 AGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTGAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGTTAAG
 4201 ACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTAC
 4301 GGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACACCG
 4401 CTGGTAGCGGTGGTTTTTTTTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTACGGGTCTGACGCTCA

NotI (4563)

4501 GTGGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAAATATCTTTATTTTCATTACATCTGT
 4601 GTGTTGGTTTTTTGTGTAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGC
 4701 AGGTGCCAGAACATTTCTATCGAA