





EcoRI (2990)

2901 TTGCTTGTGATACAAAACCTTGAATGGGTGTCACAAATCCAAAAGGCCGTA...  
780 F A C D T K L E W V C Q I P K G R T P K T P D W Y N P D R A G I H G  
3001 ACCTCCACTTATAATTTGAAGGAAGTGAATATTGGTTTGTGCTGATCTTCA...  
813 P P L I I E G S E Y W F V A D L H L N Y E E A V L Y C A S N H S F  
3101 CTTGCAACTATAACATCTTTTGTGGGACTAAAAGCCATCAAAAACAAAATAG...  
847 L A T I T S F V G L K A I K N K I A N I S G D G Q K W W I R I S E

EcoRV (3230)

BsrGI (3275)

3201 GGCCAATAGATGATCATTTTACATACTCAGATATCCATGGCACCGCTTTC...  
880 W P I D D H F T Y S R Y P W H R F P V T F G E E C L Y M S A K T W L  
3301 TATCGACTTAGGTAACCAACAGACTGTAGTACCAAGTTGCCCTTCATCTGT...  
913 I D L G K P T D C S T K L P F I C E K Y N V S S L E K Y S P D S A  
3401 GCTAAAGTGAATGTTCTGAGCAATGGATTCTTTTCAAGAATAAGTGT...  
947 A K V Q C S E Q W I P F Q N K C F L K I K P V S L T F S Q A S D T

BspEI (3570)

3501 GTCACCTCTATGGTGGCACCCCTTCTTCACTGTTGAGCCAGATTGAACA...  
980 C H S Y G G T L P S V L S Q I E Q D F I T S L L P D M E A T L W I G  
3601 TTTGCGCTGGACTGCTATGAAAAGATAAAACAAATGGACAGATAACAGAG...  
1013 L R W T A Y E K I N K W T D N R E L T Y S N F H P L L V S G R L R  
3701 ATACCAGAAAATTTTTTGGAGGAAGAGTCTCGTACCCTGTGCCCTAATA...  
1047 I P E N F F E E E S R Y H C A L I L N L Q K S P F T G T W N F T S

DraIII (3811)

3801 GCAGTGAACGCGCACTTTGTCTCTCTGTGAGAAATATTCAGAAGTTAA...  
1080 C S E R H F V S L C Q K Y S E V K S R Q T L Q N A S E T V K Y L N N  
BsrGI (3902)

3901 TCTGTACAAAATAATCCCAAAGACTCTGACTTGGCACAGTGTCTAAAAGG...  
1113 L Y K I I P K T L T W H S A K R E C L K S N M Q L V S I T D P Y Q  
4001 CAGGCATTCTCAGTGTGAGGCGCTCCTTCACTCTTCTTATGGATCGGAC...  
1147 Q A F L S V Q A L L H N S S L W I G L F S Q D D E L N F G W S D G  
4101 AACGTCTTCATTTAGTGCCTGGCTGAACTAATGGGCAACTCGAAGACTGT...  
1180 K R L H F S R W A E T N G Q L E D C V V L D T D G F W K T V D C N D  
4201 CAATCAACAGGTGCTATTTGCTACTATTGAGAAATGAGACTGAAAAGAG...  
1213 N Q P G A I C Y Y S G N E T E K E V K P V D S V K C P S V L N T  
4301 CCGTGGATACCATTTCAGAACTGTTGCTACAATTTATAATAACAAAGAA...  
1247 P W I P F Q N C C Y N F I I T K N R H M A T T Q D E V H T K C Q K  
4401 TGAATCCAAAATCACATATTCTGAGTATTGAGATGAAAAGGAGAATAAC...  
1280 L N P K S H I L S I R D E K E N N F V L E Q L L Y A M A S W V M  
4501 GTTAGAATAAAGTATAGAAATAAGTCTTATGTGGTTTGATAAGACCC...  
1313 L G I T Y R N K S L M W F D K T P L S Y T H W R A G R P T I K N E

ScaI (4618)

4601 AAGTTTTTGGCTGGTTTAAAGTACTGACGGCTTCTGGGATATTCAAAC...  
1347 K F L A G L S T D G G F W D I Q T F K V I E E A V Y F H Q H S I L A  
4701 GTAAAATTGAAATGGTTGACTACAAAGAAGAATAATACTACTACTGCCA...  
1380 C K I E M V D Y K E E Y N T T L P Q F M P Y E D G I Y S V I Q K K V  
4801 AACATGGTATGAAGCATTAAACATGTGTCTCAAAGTGGAGGTCACCTG...  
1413 T W Y E A L N M C S Q S G G H L A S V H N Q N G Q L F L E D I V K

BspHI (4935)

4901 CGTGATGGATTTCCACTATGGGTTGGGCTCTCAAGTCATGGAAGTGA...  
1447 R D G F P L W V G L S S H D G S E S S F E W S D G S T F D Y I P W  
5001 AAGGCCAAACATCTCCTGGAATTTGTGTCTCTTGGATCCAAAAGGAAC...  
1480 K G Q T S P G N C V L L D P K G T W K H E K C N S V K D G A I C Y K  
5101 ACCTCAAAAATCTAAAAAGCTGTCCCGTCTTACATATTTCATCAAGAT...  
1513 P T K S K K L S R L T Y S S R C P A A K E N G S R W I Q Y K G H C  
5201 TACAAGTCTGATCAGGCATTGCACAGTTTTTCAAGGCCAAAAAATTGT...  
1547 Y K S D Q A L H S F S E A K K L C S K H D H S A T I V S I K D E D  
5301 AGAATAAATTTGTGAGCAGACTGATGAGGGAAAATAATAACATTACCA...  
1580 E N K F V S R L M R E N N N I T M R V W L G L S Q H S V D Q S W S W

PshAI (5418)

5401 GTTAGATGGATCAGAAGTGACATTTGTCAAATGGGAAAATAAAAGTAA...  
1613 L D G S E V T F V K W E N K S K S G V G R C S M L I A S N E T W K

Bsp120I (5550)

5501 AAAGTTGAATGTGAACATGGTTTTGGAAGAGTTGTCTGCAAGTGCCT...  
1647 K V E C E H G F G R V V C K V P L G P D Y T A I A I I V A T L S I

BstAPI (5640)

5601 TAGTTCTCATGGGCGGACTGATTTGGTTCTCTTCCAAAGGCACCGTT...  
1680 L V L M G G L I W F L F Q R H R L H L A G F S S V R Y A Q G V N E D

NheI (5738)

5701 TGAGATTATGCTTCTTCTTCCATGACTAAATCTTCCGCTAGCTGGCC...  
1713 E I M L P S F H D •

HpaI (5876)

MfeI (5887)

5801 GTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTT...  
GTAACCATTATAAGCTGCAATAAACCAAGTAAACAACAACAAATTGCATTCAT

EcoRI (5972)

5901 TTTATGTTTCAGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAA...  
AACCTCTACAAATGTGGTATGGAAATTTAAAATACAGCATAGCAAACCT

6001 TTAACCTCCAATCAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCC

6101 TCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTTCCAAGGTTTGAAGTCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCC

6201 CTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAAT

6301 ATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTG

6401 AGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCACA

6501 TGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCAC

6601 AGCAGACCAATGGCAATGGCTTCCAGCAGACAGTACCCTGCAATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCAGTCTTGGTCTGATG

6701 GCCGCCCCGACATGGTGTCTGTTGCTCATAGAGCATGGTGATCTTCTCAGTGGCGACTCCACCAGCTCCAGATCTGCTGAGAGATGTTGAAGTCT

6801 TCATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGATGGCGTCTCCAGCTTATCT

6901 GACGGTCTACTAAACGAGCTCTGTTATATAGACCTCCCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAA

7001 GTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATG

7101 TACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCC

7201 AGGCGGGCATTACCCTGATTGACGTCAATAGGGGGTACTTGGCATATGATACACTTGATGTACTGCAAGTGGGAGTTTACCCTAAATACTCCAC

7301 CCATTGACGTCAATGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGG

7401 CCATTTACGTAAGTTATGTAACGCTGCAAGTTAATAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGGTGGC

7501 GTTTTTCCATAGGCTCCGCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTT

7601 CCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATA

7701 GCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCCTGCGCTTATCCGG

7801 TAACTATCGTCTTGAGTCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCT

7901 ACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTG

8001 GTAGCTCTTGATCCGGCAACAAACCACCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCC

8101 TTTGATCTTTTCTACGGGCTGACGCTCAGTGGAAACGAAACTCACGTTAAGGGATTTTGGTATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCA

8201 ATAAAATATCTTTATTTTATTACATCTGTGTGTTGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAAACT

8301 AGCAAAATAGGCTGTCCCGAGTCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA

SapI (6154)

SwaI (6225)

141 • N R T Y K

SacI (6486)

XmnI (6792)

AseI (6858)

SacI (6915)

SpeI (7013)

SnaBI (7141)

PacI (7432)

SdaI (7424)

ApaLI (7756)

EagI (8192)

PacI (8172) SwaI (8181) NotI (8191)