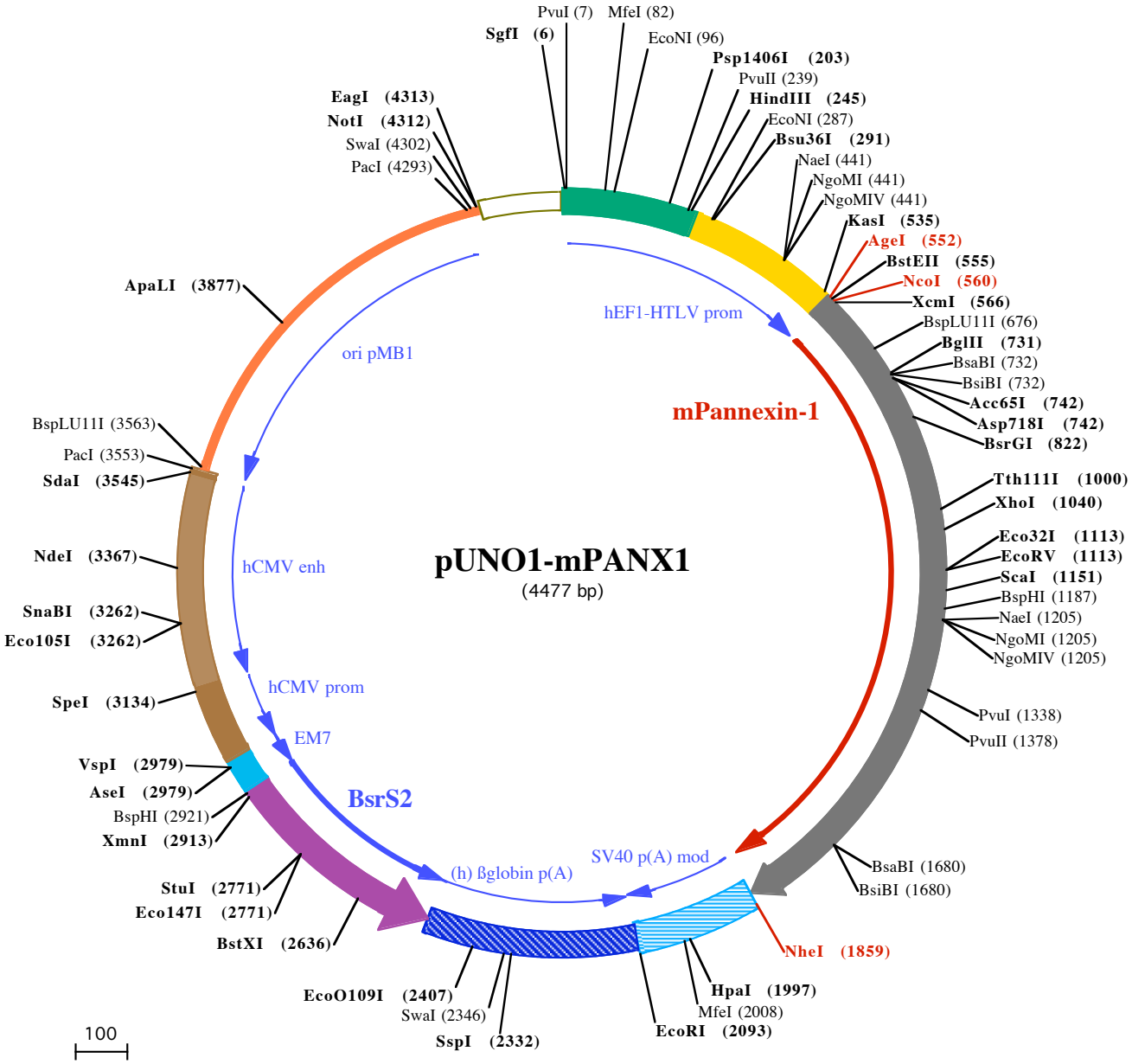
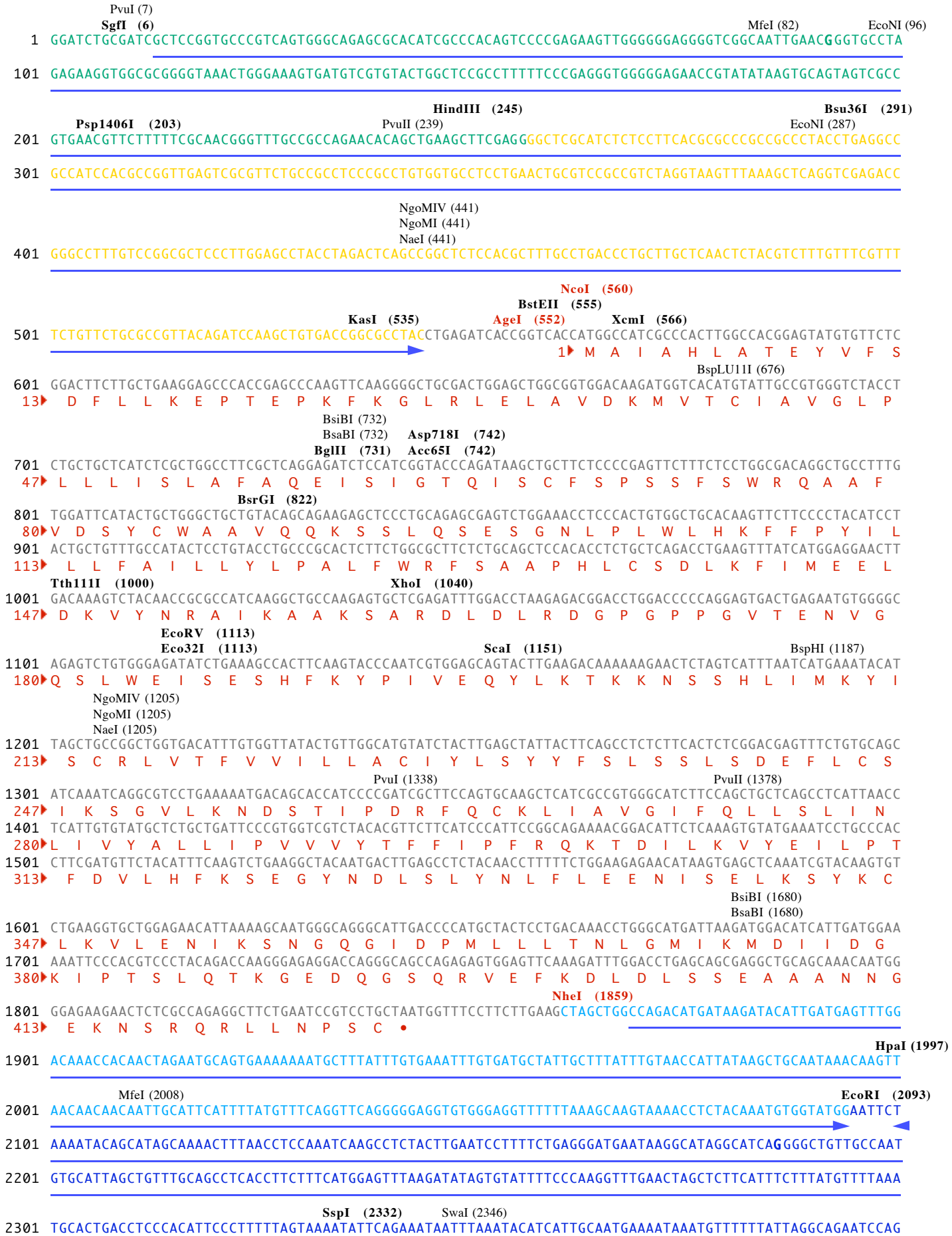
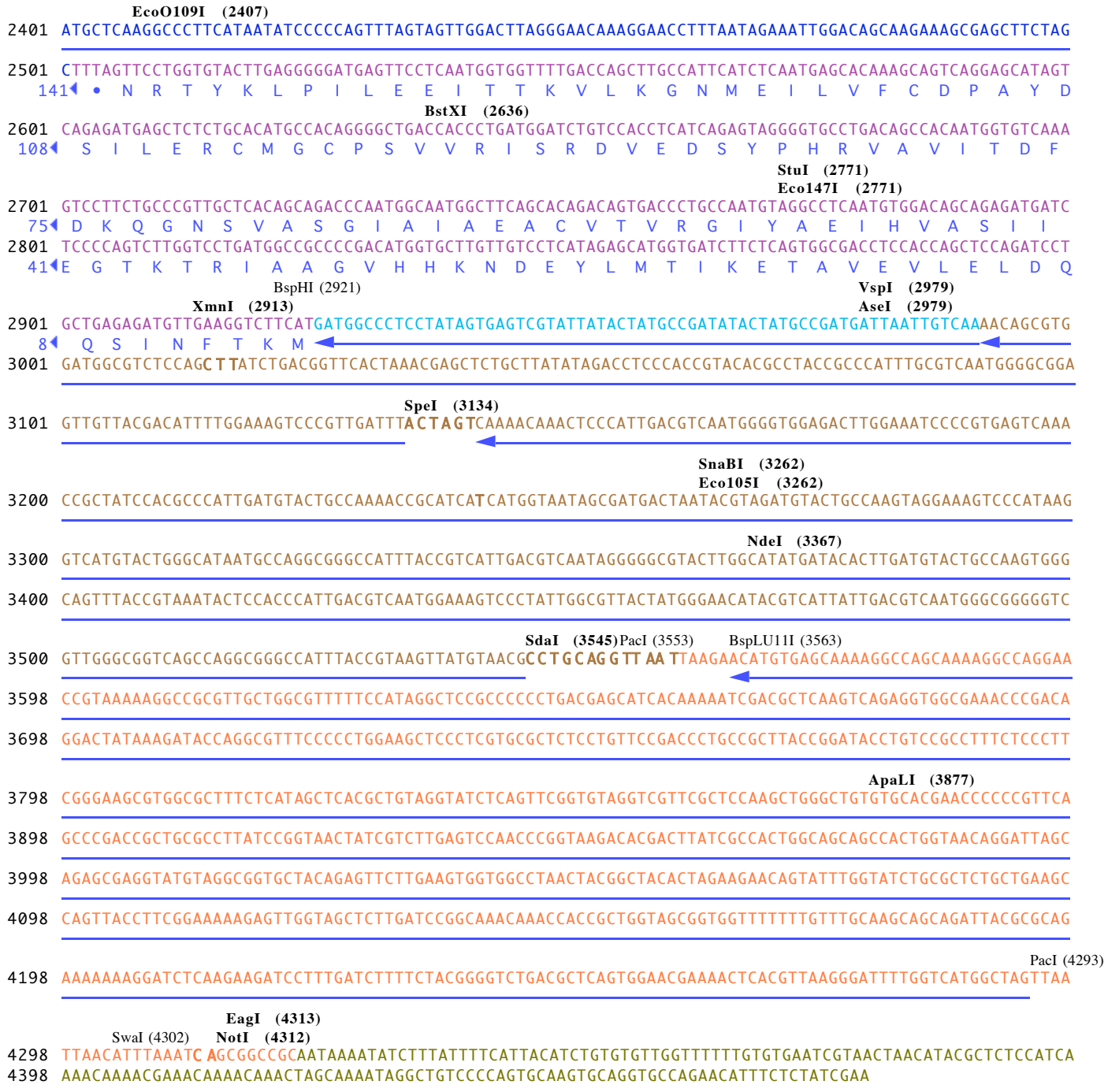

pUNO1-mPANX1
(4477 bp)
mPannexin-1
BsrS2
hEF1-HTLV prom
ori pMB1
hCMV enh
hCMV prom
EM7
(h) ßglobin p(A)
SV40 p(A) mod
PvuI (7)
MfeI (82)
SgfI (6)
EcoNI (96)
Psp1406I (203)
PvuII (239)
HindIII (245)
EcoNI (287)
Bsu36I (291)
NaeI (441)
NgoMI (441)
NgoMIV (441)
KasI (535)
AgeI (552)
BstEII (555)
NcoI (560)
XcmI (566)
BspLU11I (676)
BglII (731)
BsaBI (732)
BsiBI (732)
Acc65I (742)
Asp718I (742)
BsrGI (822)
Tth111I (1000)
XhoI (1040)
Eco32I (1113)
EcoRV (1113)
ScaI (1151)
BspHI (1187)
NaeI (1205)
NgoMI (1205)
NgoMIV (1205)
PvuI (1338)
PvuII (1378)
BsaBI (1680)
BsiBI (1680)
NheI (1859)
HpaI (1997)
MfeI (2008)
EcoRI (2093)
SspI (2332)
SwaI (2346)
EcoO109I (2407)
BstXI (2636)
Eco147I (2771)
StuI (2771)
XmnI (2913)
BspHI (2921)
AseI (2979)
VspI (2979)
SpeI (3134)
Eco105I (3262)
SnaBI (3262)
NdeI (3367)
SdaI (3545)
PacI (3553)
BspLU11I (3563)
ApaLI (3877)
EagI (4313)
NotI (4312)
SwaI (4302)
PacI (4293)
100

InvivoGen


PvuI (7)
SgfI (6)
MfeI (82)
EcoNI (96)
1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGCAGAGCGCACATCGCCCACAGTCCCCGAGAAGTTGGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGGTAAACTGGGAAAGTGATGTCGTGTACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC
HindIII (245)
Psp1406I (203)
PvuII (239)
Bsu36I (291)
EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCCTTCACGCGCCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCCTCCCGCCTGTGGTGCCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
NgoMIV (441)
NgoMI (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCCTGACCCTGCTTGCTCAACTCTACGTCTTTGTTTCGTTT
NcoI (560)
BstEII (555)
KasI (535)
AgeI (552)
XcmI (566)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCGCCTACCTGAGATCACCGGTCACCATGGCCATCGCCCACTTGGCCACGGAGTATGTGTTCTC
1 M A I A H L A T E Y V F S
BspLU11I (676)
601 GGACTTCTTGCTGAAGGAGCCCACCGAGCCCAAGTTCAAGGGGCTGCGACTGGAGCTGGCGGTGGACAAGATGGTCACATGTATTGCCGTGGGTCTACCT
13 D F L L K E P T E P K F K G L R L E L A V D K M V T C I A V G L P
BsiBI (732)
BsaBI (732)
Asp718I (742)
BglII (731)
Acc65I (742)
701 CTGCTGCTCATCTCGCTGGCCTTCGCTCAGGAGATCTCCATCGGTACCCAGATAAGCTGCTTCTCCCCGAGTTCTTTCTCCTGGCGACAGGCTGCCTTTG
47 L L L I S L A F A Q E I S I G T Q I S C F S P S S F S W R Q A A F
BsrGI (822)
801 TGGATTCATACTGCTGGGCTGCTGTACAGCAGAAGAGCTCCCTGCAGAGCGAGTCTGGAAACCTCCCACTGTGGCTGCACAAGTTCTTCCCCTACATCCT
80 V D S Y C W A A V Q Q K S S L Q S E S G N L P L W L H K F F P Y I L
901 ACTGCTGTTTGCCATACTCCTGTACCTGCCCGCACTCTTCTGGCGCTTCTCTGCAGCTCCACACCTCTGCTCAGACCTGAAGTTTATCATGGAGGAACTT
113 L L F A I L L Y L P A L F W R F S A A P H L C S D L K F I M E E L
Tth111I (1000)
XhoI (1040)
1001 GACAAAGTCTACAACCGCGCCATCAAGGCTGCCAAGAGTGCTCGAGATTTGGACCTAAGAGACGGACCTGGACCCCCAGGAGTGACTGAGAATGTGGGGC
147 D K V Y N R A I K A A K S A R D L D L R D G P G P P G V T E N V G
EcoRV (1113)
Eco32I (1113)
ScaI (1151)
BspHI (1187)
1101 AGAGTCTGTGGGAGATATCTGAAAGCCACTTCAAGTACCCAATCGTGGAGCAGTACTTGAAGACAAAAAAGAACTCTAGTCATTTAATCATGAAATACAT
180 Q S L W E I S E S H F K Y P I V E Q Y L K T K K N S S H L I M K Y I
NgoMIV (1205)
NgoMI (1205)
NaeI (1205)
1201 TAGCTGCCGGCTGGTGACATTTGTGGTTATACTGTTGGCATGTATCTACTTGAGCTATTACTTCAGCCTCTCTTCACTCTCGGACGAGTTTCTGTGCAGC
213 S C R L V T F V V I L L A C I Y L S Y Y F S L S S L S D E F L C S
PvuI (1338)
PvuII (1378)
1301 ATCAAATCAGGCGTCCTGAAAAATGACAGCACCATCCCCGATCGCTTCCAGTGCAAGCTCATCGCCGTGGGCATCTTCCAGCTGCTCAGCCTCATTAACC
247 I K S G V L K N D S T I P D R F Q C K L I A V G I F Q L L S L I N
1401 TCATTGTGTATGCTCTGCTGATTCCCGTGGTCGTCTACACGTTCTTCATCCCATTCCGGCAGAAAACGGACATTCTCAAAGTGTATGAAATCCTGCCCAC
280 L I V Y A L L I P V V V Y T F F I P F R Q K T D I L K V Y E I L P T
1501 CTTCGATGTTCTACATTTCAAGTCTGAAGGCTACAATGACTTGAGCCTCTACAACCTTTTTCTGGAAGAGAACATAAGTGAGCTCAAATCGTACAAGTGT
313 F D V L H F K S E G Y N D L S L Y N L F L E E N I S E L K S Y K C
BsiBI (1680)
BsaBI (1680)
1601 CTGAAGGTGCTGGAGAACATTAAAAGCAATGGGCAGGGCATTGACCCCATGCTACTCCTGACAAACCTGGGCATGATTAAGATGGACATCATTGATGGAA
347 L K V L E N I K S N G Q G I D P M L L L T N L G M I K M D I I D G
1701 AAATTCCCACGTCCCTACAGACCAAGGGAGAGGACCAGGGCAGCCAGAGAGTGGAGTTCAAAGATTTGGACCTGAGCAGCGAGGCTGCAGCAAACAATGG
380 K I P T S L Q T K G E D Q G S Q R V E F K D L D L S S E A A A N N G
NheI (1859)
1801 GGAGAAGAACTCTCGCCAGAGGCTTCTGAATCCGTCCTGCTAATGGTTTCCTTCTTGAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGG
413 E K N S R Q R L L N P S C •
HpaI (1997)
1901 ACAAACCACAACTAGAATGCAGTGAAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTT
MfeI (2008)
EcoRI (2093)
2001 AACAACAACAATTGCATTCATTTTATGTTTCAGGTTCAGGGGGAGGTGTGGGAGGTTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTCT
2101 AAAATACAGCATAGCAAAACTTTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAAT
2201 GTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAGATATAGTGTATTTTCCCAAGGTTTGAACTAGCTCTTCATTTCTTTATGTTTTAAA
SspI (2332)
SwaI (2346)
2301 TGCACTGACCTCCCACATTCCCTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAG


EcoO109I (2407)
2401 ATGCTCAAGGCCCTTCATAATATCCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAG
2501 CTTTAGTTCCTGGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGT
141 • N R 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
BstXI (2636)
2601 CAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAA
108 S I L 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
StuI (2771)
Eco147I (2771)
2701 GTCCTTCTGCCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATC
75 D K Q G 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
2801 TCCCCAGTCTTGGTCCTGATGGCCGCCCCGACATGGTGCTTGTTGTCCTCATAGAGCATGGTGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCT
41 E G T K 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
BspHI (2921)
VspI (2979)
XmnI (2913)
AseI (2979)
2901 GCTGAGAGATGTTGAAGGTCTTCATGATGGCCCTCCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAAACAGCGTG
8 Q S I N F T K M
3001 GATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGCCCATTTGCGTCAATGGGGCGGA
SpeI (3134)
3101 GTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAA
SnaBI (3262)
Eco105I (3262)
3200 CCGCTATCCACGCCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAAG
NdeI (3367)
3300 GTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGG
3400 CAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGGTC
SdaI (3545) PacI (3553)
BspLU11I (3563)
3500 GTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAA
3598 CCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA
3698 GGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTT
ApaLI (3877)
3798 CGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCA
3898 GCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGC
3998 AGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGC
4098 CAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAG
PacI (4293)
4198 AAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAA
EagI (4313)
SwaI (4302)
NotI (4312)
4298 TTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCA
4398 AAACAAAACGAAACAAAACAAACTAGCAAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA