

pMSCV-Puro-GFP miR Cnt1

Absent Sites	0	AarI, AbsI, Accl, AjuI, AjuI', AlfI, AlfI', ApaI, AsiSI, AvrII, BamHI, BarI, BarI', BbsI, BclI, BpI, BpI', BsaAI, BsaBI, BstBI, BstXI, BstZ17I, CspCI, CspCI', FseI, FspAI, HincII, HpaI, MauBI, MfeI, MluI, MreI, NruI, PacI, PfiMI, PmeI, PmlI, PshAI, PstI, PspOMI, PspXI, PstI, PstI', Sall, SanDI, SbfI, SfiI, SgrDI, SnaBI, SrfI, SwaI, XcmI, XhoI
AfIII	1	4426
ArsI	1	1732
ArsI'	1	1700
BglII	1	1411
BpI	1	2456
BsiWI	1	2759
BsmI	1	2614
BspMI	1	2692
BtgZI	1	1559
Clal	1	3357
DraIII	1	3274
EcoRI	1	2173
HindIII	1	2694
NcoI	1	1436
NdeI	1	6490
NotI	1	2158
NsiI	1	3356
PciI	1	4426
RsrII	1	2819
SacII	1	2917
Scal	1	5799
SgrAI	1	6862

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5' TGAAAGACCCACCTGTAGGTTTGGCAAGCTAGCTTAAGTAACGCCATTTTGCAAGGCATGGAAAATACATAACTGAGAATAGAGAAGTTCAGATCAAGG
 100
 3' ACTTCTGGGGTGGACATCCAAACCGTTCGATCGAATTCATTGCGGTAACCGTTCCTGACCTTTTATGTATTGACTCTTATCTCTTCAAGTCTAGTTCC
 5' pCMV LTR

5' TTAGGAACAGAGACAGCAGAATATGGGCCAAACAGGATATCTGTGGTAAGCAGTTCTGCCCCGGCTCAGGGCCAAGAACAGATGGTCCCCAGATGCG
 200
 3' AATCCTTGTCTCTCTGTGCTTATACCCGGTTTGTCTTATAGACACCATTTCGTCAAGGACGGGGCCGAGTCCCGGTTCTTGTCTACCAGGGGTCTACGC
 5' pCMV LTR

5' GTCCCGCCCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTGCCCCAAGGACCTGAAATGACCCTGTGCCTTATTTGAACTAACCAATCAGTTC
 300
 3' CAGGGCCGGGAGTCGTCAAAGATCTCTTGGTAGTCTACAAAGTCCACGGGGTTCCTGGACTTTACTGGGACACGGAATAAACTTGATTGGTTAGTCAAG
 5' pCMV LTR

5' GCTTCTCGTCTCTGTTCGCGCCTTCTGCTCCCCGAGCTCAATAAAAAGAGCCACAAACCCCTCACTCGGCGCGCAGTCTCCGATAGACTGCGTCGCCC
 400
 3' CGAAGAGCGAAGACAAGCGCGGAAGACGAGGGGCTCGAGTTAATTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTGAGGAGGCTATCTGACGCAGCGGG
 5' pCMV LTR

5' GGGTACCCGTATTCCCAATAAAGCCTCTTGCTGTTTGCATCCGAATCGTGGACTCGCTGATCCTTGGGAGGGTCTCCTCAGATTGATTGACTGCCACCT
 500
 3' CCCATGGGCATAAGGGTTAATTTGCGGAGAACGACAAACGTAGGCTTAGCACCTGAGCGACTAGGAACCCCTCCAGAGGAGTCTAACTAACTGACGGGTGGA
 5' pCMV LTR

5' CGGGGTCTTTTCAATTTGGAGGTTCCACCGAGATTGGAGACCCCTGCCAGGGACCACCGACCCCCCGCGGGAGGTAAGCTGGCCAGCGGTCTGTTTCG
 600
 3' GCCCCAGAAAGTAAACCTCCAAGGTGGCTCTAAACCTCTGGGGACGGGTCCCTGTTGGCTGGGGGGCGGCCCTCCATTCGACCGGTGCGCAGCAAAAGC
 5' pCMV LTR

Pack Signal

5' TGTCTGTCTCTGTCTTGTGCGTGTGTGCGCCGCATCTAATGTTTGGCCTGCGTCTGTACTAGTTAGCTAACTAGCTCTGTATCTGGCGGACCCGTGG
 700
 3' ACAGACAGAGACAGAAACACGCACAAACACGGCCGTAGATTACAAACCGCGACGCAGACATGATCAATCGATTGATCGAGACATAGACCGCTGGGCACC
 Pack Signal

5' TGGAATGACGAGTTCTGAACACCCGGCCGCAACCTGGGAGACGTCCCAGGGACTTTGGGGCCGTTTGTGGCCCGACCTGAGGAAGGGAGTCGATG
 800
 3' ACCTTGACTGCTCAAGACTTGTGGGCCGGCGTTGGGACCTCTGCAGGGTCCCTGAAACCCCGGCAAAAACACCGGGCTGGACTCCTTCCTCAGCTAC
 Pack Signal

5' TGGAATCCGACCCCGTCAGGATATGTGGTTCTGGTAGGAGACGAGAACC'TAAACAGTTCCCGCCTCCGTCTGAATTTTGTCTTTCGGTTTGAACCGAA
 900
 3' ACCTTAGGCTGGGGCAGTCTATACACCAAGACCATCCTCTGCTCTTGGATTTTGTCAAGGGCGGAGGCAGACTTAAAAACGAAAGCCAAACCTTGGCTT
 Pack Signal

5' GCCGCGCTCTGTCTGCTGCAGCGCTGCAGCATCGTTCGTGTGTCTCTGTCTGACTGTGTTTCTGTATTTGTCTGAAAATTAGGGCCAGACTGTTAC
 1000
 3' CGGCAGCAGAACAGACGACGTCGCGACGTCGTAGCAAGACACAAACAGAGACAGACTGACACAAAGACATAAACAGACTTTTAATCCCGGTCTGACAATG
 Pack Signal

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5' CACTCCCTTAAGTTTGACCTTAGGTCACCTGAAAGATGTCGAGCGGATCGCTCACACCAGTCGGTAGATGTCAAGAAGAGACGTTGGGTTACCTTCTGC
 1100
 3' GTGAGGGAATCAAACTGGAATCCAGTGACCTTTCTACAGCTCGCCTAGCGAGTGTGGTCAGCCATCTACAGTTCTTCTCTGCAACCCAATGGAAGACG
 Pack Signal

5' TCTGCAGAATGGCCAACCTTTAACGTCGGATGGCCGCGAGACGGCACCTTTAACCGAGACCTCATCACCAGGTTAAGATCAAGGTCTTTTACCTGGCC
 1200
 3' AGACGCTTACCGGTTGGAATTCAGCCTACCGGCGCTCTGCCGTGGAATTTGGCTCTGGAGTAGTGGGTCCAATTCTAGTTCAGAAAAGTGGACCGG
 Pack Signal

5' CGCATGGACACCCAGACCAGGTCCTTACATCGTGACCTGGGAAGCCTTGGCTTTTGACCCCTCCCTGGGTCAAGCCCTTTGTACACCCTAAGCCTCC
 1300
 3' GCGTACCTGTGGGTCTGGTCCAGGGATGTAGCACTGGACCCTTCGGAACCGAAACTGGGGGAGGGACCCAGTTCGGGAAACATGTGGGATTCGGAGG
 Pack Signal

5' GCCTCTCTTCTCCATCCGCCCCGTCTCTCCCTTGAACCTCCTCGTTCGACCCCGCCTCGATCCTCCCTTTATCCAGCCCTCACTCCTTCTTAGGC
 1400
 3' CGGAGGAGAAGGAGGTAGGCGGGGCGAGAGGGGAACTTGGAGGAGCAAGCTGGGGCGGAGCTAGGAGGAAATAGGTGGGAGTGAGGAAGAGATCCG
 Pack Signal

BglII NcoI
 5' GCCGGAATTAGATCTccagcgtgaccggtgcccaccatggtgagcaagggcgaggagctgttcaccggggtggtgcccatcctggtcgagctggacggcg
 1500
 3' CGGCCTTAATCTAGAggtcgactggccagcgtggtaccactcgttcccgtcctcgacaagtggccccaccacgggtaggaccagctcgacctgccgc
 Pa...I GFP

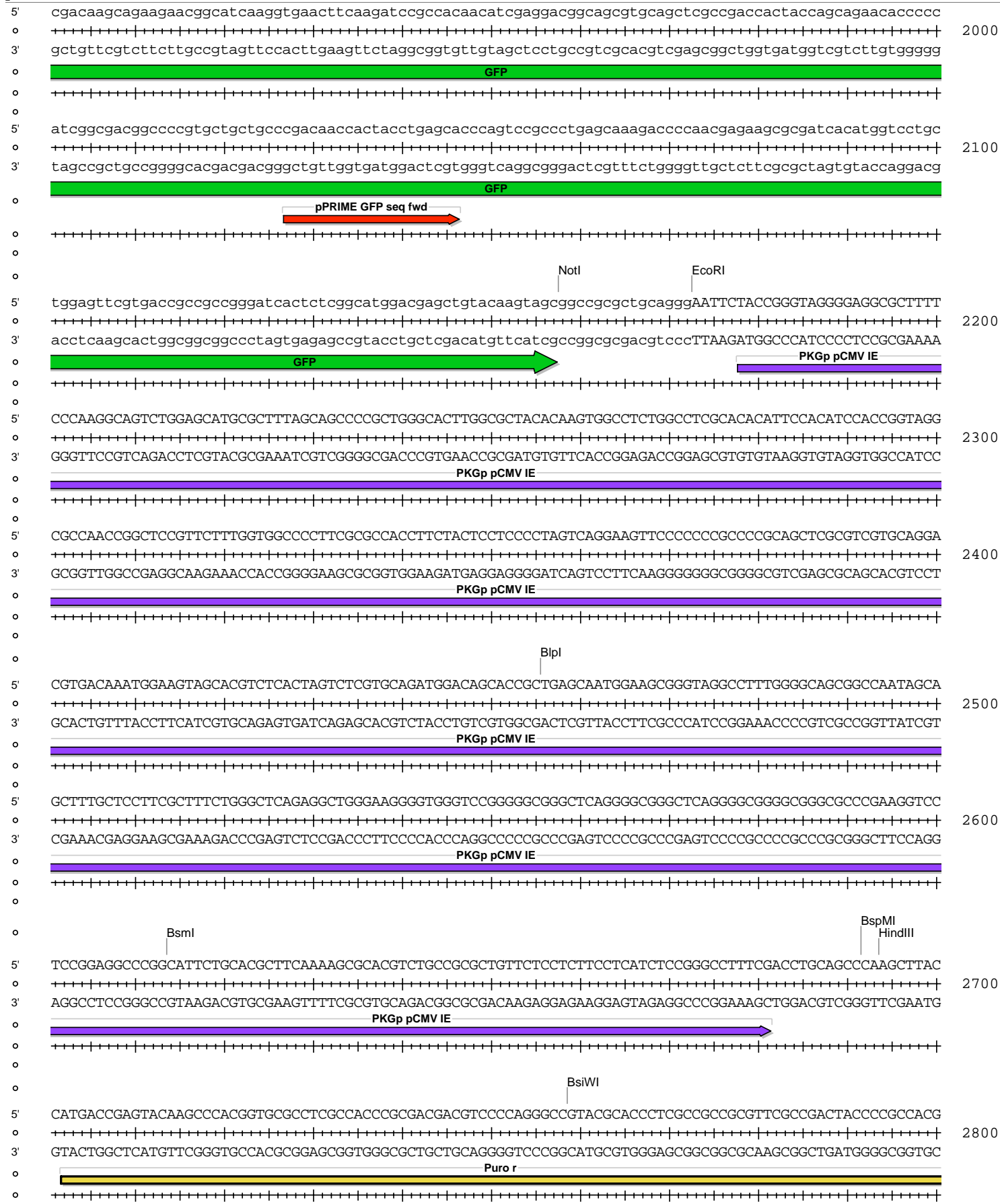
BtgZI
 5' acgtaaacggccacaagttcagcgtgtccggcgagggcgagggcgatgccacctacggcaagctgacctgaagttcatctgcaccaccggcaagctgcc
 1600
 3' tgcatttgcgggtgttcaagtcgcacaggcgctcccgtcccgtacggtggatgcccgttcgactgggacttcaagtagacgtggtggcgttcgacgg
 GFP

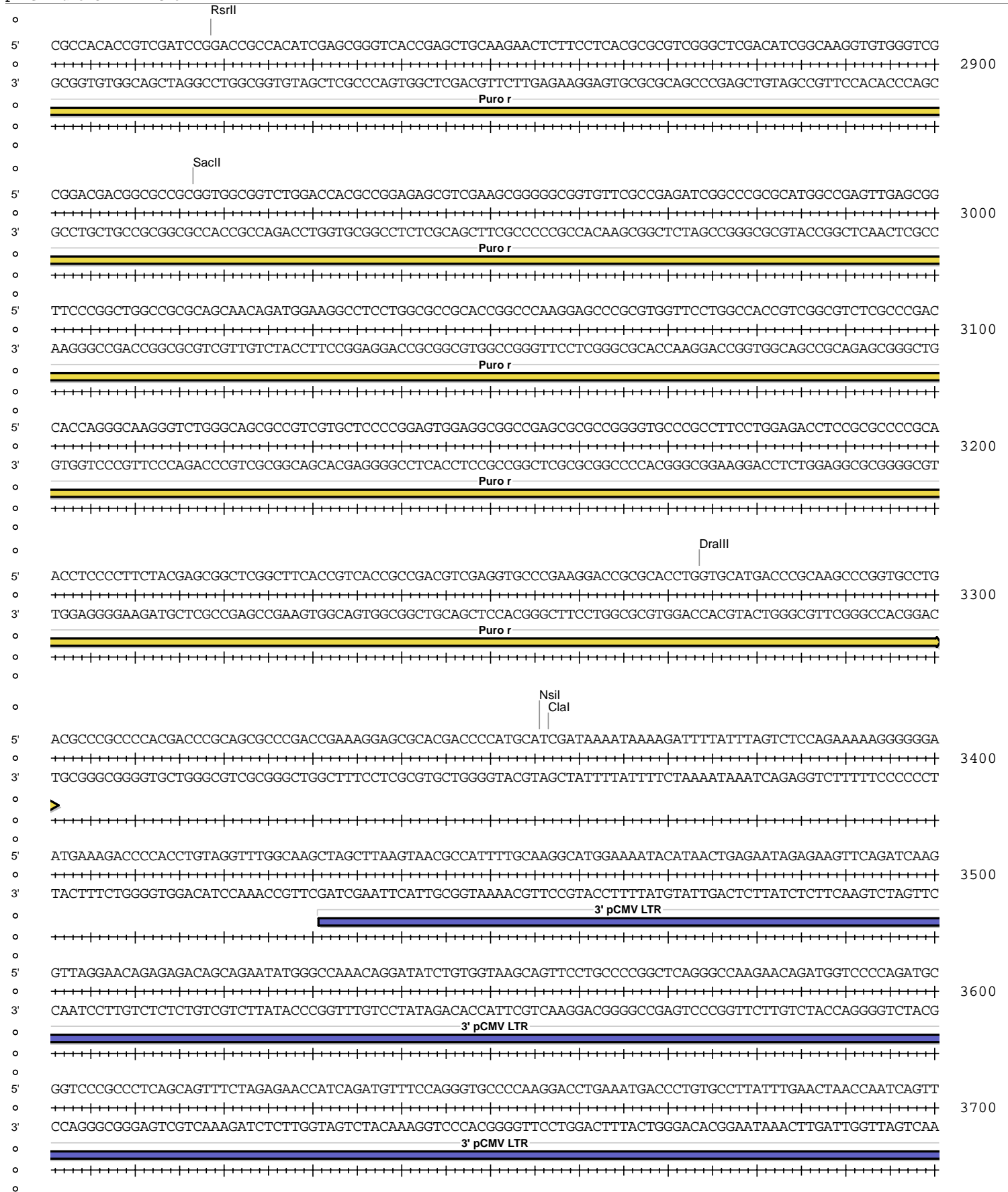
ArsI
 5' cgtgcctggccaccctcgtgaccaccctgacctacggcgtgacgtgcttcagccgtaccccgaccacatgaagcagcagacttcttcaagtccgcc
 1700
 3' gcacgggaccgggtgggagcactggtgggactggatgcccacgtcacgaagtggcgatggggctggtgtacttcgtcgtgctgaagaagttcaggcgg
 GFP

ArsI
 5' atgcccgaaggctacgtccaggagcgcaccatcttcttcaaggacgacggcaactacaagaccgcccggaggtgaagttcgagggcgacaccctggtga
 1800
 3' tacgggcttccgatgcaggtcctcgcgtggtagaagaagttcctgctgcccgtgatgttctgggcgcggtccacttcaagctcccgtgtgggaccact
 GFP

5' accgcatcgagctgaaggcatcgacttcaaggaggacggcaacatcctggggcacaagctggagtacaactacaacagccacaacgtctatatcatggc
 1900
 3' tggcgtagctcgacttcccgtagctgaagttcctcctgcccgtttaggaccccgtgttcgacctcatgtgatgttgcggtgtgcagatatagtaccg
 GFP

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5' CGCTTCTCGCTTCTGTTCGCGCGCTTCTGCTCCCGAGCTCAATAAAAGAGCCACAACCCCTCACTCGGCGCGCCAGTCTCCGATAGACTGCGTCGCC
 3' GCGAAGAGCGAAGACAAGCGCGGAAGACGAGGGGCTCGAGTTATTTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTTCAGGAGGCTATCTGACGCAGCGG
 3' pCMV LTR

5' CCGGTACCCGTGTATCCAATAAACCTTTCGAGTTGCATCCGACTTGTGGTCTCGTGTTCCTTGGGAGGGTCTCCTCTGAGTGATTGACTACCCGTCA
 3' GCCCATGGGCACATAGGTTATTTGGGAGAACGTCAACGTAGGCTGAACACCAGAGCGACAAGGAACCCCTCCAGAGGAGACTACTAAGTATGATGGGCAGT
 3' pCMV LTR

5' GCGGGGTCTTTCATGGGTAACAGTTTCTTGAAGTTGGAGAACAACATTCTGAGGGTAGGAGTCAATATTAAGTAATCCTGACTCAATTAGCCACTGTT
 3' CGCCCCAGAAAGTACCCATTGTCAAAGAACTCAACCTCTTGTGTGAAGACTCCCATCCTCAGCTTATAATTCATTAGGACTGAGTTAATCGGTGACAA
 3' pCMV LTR

5' TTGAATCCACATACTCCAATACTCCTGAAATAGTTTCAATTATGGACAGCGCAGAAGAGCTGGGGAGAATTAATTCGTAATCATGGTCATAGCTGTTTCTG
 3' AACTTAGGTGTATGAGGTTATGAGGACTTATCAAGTAATACCTGTGCGCTTCTCGACCCCTCTTAATTAAGCATTAGTACCAGTATCGACAAAGGAC

5' TGTGAAATTGTTATCCGCTCACAATCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAAT
 3' ACACTTTAAACAATAGCGAGTGTAAAGGTGTGTGTATGCTCGGCCTTCGTATTTCACATTTTCGACCCACCGATTACTACTCGATTGAGTGTAAATTA

5' TGCGTTGCGCTCACTGCCCGCTTCCAGTCGGGAAACCTGTGCTGCCAGCTGCATTAATGAATCGGCCAACGCGGGGAGAGGCGGTTTGCCTATTGGG
 3' ACGCAACGCGAGTGACGGGCGAAAGGTGAGCCCTTTGGACAGCACGGTCGACGTAATTACTTAGCCGTTGCGCGCCCTCTCCGCCAACGCATAACCC

5' CGCTCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTGCTTCCGGTGCGGCGAGCGGTATCAGCTCACTCAAAGCGGTAATACGGTTATCCACAG
 3' GCGAGAAGGCGAAGGAGCGAGTGACTGAGCGACGCGAGCCAGCAAGCCGACCGCTCGCCATAGTCGAGTGAGTTTCCGCCATTATGCCAATAGGTGTC

PciI
 AflIII

5' AATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGCCAGGAACCGTAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCG
 3' TTAGTCCCCTATTGCGTCTTTCTTGTACACTCGTTTTTCCGGTCTTTTTCCGGTCTTTGGCATTTTTTCCGGCGCAACGACCAGCAAAAAGGTATCCGAGGC

5' CCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTC
 3' GGGGGACTGCTCGTAGTGTTTTAGCTGCGAGTTCAGTCTCCACCGCTTTGGGCTGTCTGATATTTCTATGGTCCGCAAAGGGGACCTTCGAGGGAG

5' GTGCGCTCTCTGTTCCGACCTGCGCTTACCGGATACTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATC
 3' CACGCGAGAGGACAAGGCTGGGACGGCGAATGGCCTATGGACAGGCGGAAAGAGGGAAGCCCTTCGCACCGCGAAAGAGTATCGAGTGCGACATCCATAG

5' TCAGTTCGGTGTAGGTGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTC
 3' AGTCAAGCCACATCCAGCAAGCGAGGTTTCGACCCGACACAGTGTTCGGGGGCAAGTTCGGGCTGGCGACGCGGAATAGGCCATTGATAGCAGAATCAG

5' CAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGG
 3' GTTGGGCCATTCTGTGCTGAATAGCGGTGACCGTCGTCGGTGACCATTGTCTAATCGTCTCGCTCCATACATCCGCCACGATGTCTCAAGAACTTCACC

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5' TGGCCTAACTACGGCTACACTAGAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCA
 0 ++++++
 3' ACCGGATTGATGCCGATGTGATCTTCTGTGCATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTCTCAACCATCGAGAACTAGGCCGT
 0 ++++++ 5000

5' AACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGG
 0 ++++++
 3' TTGTTTGGTGGCGACCATCGCCACCAAAAAACAAACGTTTCGTCGCTAATGCGCGTCTTTTTTTCCTAGAGTTCTTCTAGGAACTAGAAAAGATGCC
 0 ++++++ 5100

5' GTCTGACGCTCAGTGAACGAAAACCTACGTTAAGGGATTTGGTTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTAATAATGAAGT
 0 ++++++
 3' CAGACTGCGAGTACCTTGTCTTTGAGTGCAATTCCTTAAACCAGTACTTAATAGTTTTTTCTAGAGTGGATCTAGGAAAATTAATTTTACTTCA
 0 ++++++ 5200

5' TTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCTGTCAT
 0 ++++++
 3' AAATTTAGTTAGATTTTCAATATACTCATTGAAACCAGACTGTCAATGGTTACGAATTAGTCACTCCGTGGATAGAGTCGCTAGACAGATAAAGCAAGTA
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5300

5' CCATAGTTGCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACC
 0 ++++++
 3' GGTATCAACGACTGAGGGGCGACACATCTATTGATGCTATGCCCTCCCGAATGGTAGACCGGGTACGACGTTACTATGGCGCTCTGGGTGCGAGTGG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5400

5' GGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGC
 0 ++++++
 3' CCGAGGTCTAAATAGTCGTTATTTGGTGGTTCGCGCTTCCCGGCTCGCGTCTTACCAGGACGTTGAAATAGGCGGAGGTAGGTGAGATAATTAACAACG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5500

5' CGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCACAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTT
 0 ++++++
 3' GCCCTTCGATCTCATTTCATCAAGCGGTCAATTAACAACGCGTTGCAACAACGGTAAACGATGTCCGTAGCACCACAGTGCAGCAGCAAACCATACCGAA
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5600

5' CATTGAGCTCCGGTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTCAGAAG
 0 ++++++
 3' GTAAGTCGAGGCCAAGGGTGTAGTTCCGCTCAATGTACTAGGGGTACAACAGTTTTTTCGCCAATCGAGGAAGCCAGGAGGTAGCAACAGTCTTC
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5700

5' TAAGTTGGCCGAGTGTATCACTCATGTTATGGCAGCACTGCATAATTCTTACTGTTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAAGTAC
 0 ++++++ Scal
 3' ATTCAACCGCGCTCACAATAGTGAGTACCAATACCGTCTGACGTATTAAGAGAATGACAGTACGGTAGGCATTCTACGAAAAGACTGACCCTCATG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5800

5' TCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAG
 0 ++++++
 3' AGTTGGTTCAGTAAGACTCTTATCACATACGCCGCTGGCTCAACGAGAACGGCCGAGTTATGCCCTATTATGGCGCGGTGATCGTCTTGAAATTTTC
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5900

5' TGCTCATCATTTGAAAAAGCTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACCTGATC
 0 ++++++
 3' ACGAGTAGTAACCTTTTGAAGAAGCCCGCTTTTGGAGTTCCTAGAATGGCGACAACCTTAGGTCAAGCTACATTGGGTGAGCAGTGGGTTGACTAG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 6000

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5' TTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGC AAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATA
 6100
 3' AAGTCGTAGAAAATGAAAAGTGGTCGCAAAGACCCACTCGTTTTTGTCTTCCGTTTTACGGCGTTTTTCCCTTATTCCCGCTGTGCCTTTACAACCTAT
 Amp Res

5' CTCATACTCTTCCTTTTCAATATTATGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATACATATTGAATGTATTAGAAAAATAAACAAATAG
 6200
 3' GAGTATGAGAAGGAAAAAGTTATAATAACTTCGTAAATAGTCCCAATAACAGAGTACTCGCCTATGTATAAACTTACATAAATCTTTTTATTTGTTTATC
 Am...s

5' GGGTTCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAAATAGGCGTATCACGAGGCCCTT
 6300
 3' CCCAAGGCGCGTGTAAGGGGCTTTTACGGTGGACTGCAGATTCCTTGGTAATAATAGTACTGTAATTGGATATTTTTATCCGCATAGTGCTCCGGGAA

5' TCGTCTCGCGCTTTCGGTGTGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAA
 6400
 3' AGCAGAGCGCCAAAGCCACTACTGCCACTTTTGGAGACTGTGTACGTGAGGGCTCTGCCAGTGTGAAACAGACATTGCCTACGGCCCTCGTCTGTT

5' GCCCGTCAGGGCGCGTCAGCGGGTGTGGCGGGTGTGCGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGACTGAGAGTGCACCATATGCGGTGTG
 6500
 3' CGGGCAGTCCC GCGCAGTCGCCACAACCGCCACAGCCCGACCGAATTGATACGCCGTAGTCTCGTCTAACATGACTCTCACGTGGTATACGCCACAC
 Ndel

5' AAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCCATTTCGCCATTTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCTCTTC
 6600
 3' TTTATGGCGTGTCTACGCATTCTCTTTTATGGCGTAGTCCGCGTAAGCGGTAAGTCCGACGCGTTGACAACCTTCCCGCTAGCCACGCCCGGAGAAG

5' GCTATTACGCCAGCTGGCGAAAAGGGGATGTGCTGCAAGGCGATTAAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGACGGCGCAA
 6700
 3' CGATAATGCGGTGACCGCTTTCCCGCTACACGACGTTCCGCTAATTCAACCCATTGCGGTCCCAAAAAGGGTCAGTGCTGCAACATTTTGTGCGCGGTT

5' GGAATGGTGCATGCAAGGAGATGGCGCCAACAGTCCCCGGCCACGGGGCTGCCACCATACCCACGCCGAAACAAGCGCTCATGAGCCCGAAGTGGCG
 6800
 3' CCTTACCACGTACGTTCTCTACCGCGGTTGTGAGGGGCGGTTGCCCGGACGGTGGTATGGGTGCGGCTTTGTTGCGGAGTACTCGGGCTTACCCGC

5' AGCCCGATCTTCCCCATCGGTGATGTGCGCGATATAGGCGCCAGCAACCGCACCTGTGGCGCGGTGATGCCGGCCACGATGCGTCCGGCGTAGAGGCGA
 6900
 3' TCGGGCTAGAAGGGGTAGCCACTACAGCCGCTATATCCGCGGTGCTGGCGTGGACACCGCGGCCACTACGGCCGGTGCTACGCAGGCCGCATCTCCGCT
 SgrAI

5' TTAGTCCAATTTGTTAAAGACAGGATATCAGTGGTCCAGGCTCTAGTTTTGACTCAACAATATCACCAGCTGAAGCCTATAGAGTACGAGCCATAGATAA
 7000
 3' AATCAGGTTAAACAATTTCTGTCTATAGTCACCAGTCCGAGATCAAACTGAGTTGTTATAGTGGTCGACTTCGGATATCTCATGCTCGGTATCTATT

5' AATAAAAGATTTTATTTAGTCTCCAGAAAAGGGGGGAA
 7039
 3' TTATTTTCTAAAATAAATCAGAGGTCTTTTCCCGCTT