

pMSCV-Puro-GFP miR Cntl

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
BglIII	1	1411
BpI	1	2456
BsiWI	1	2759
BsmI	1	2614
BspMI	1	2692
BtgZI	1	1559
Clal	1	3357
DrallI	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' AATCCTTGTCTCTCTGTGCTTATACCCGGTTTGTCTTATAGACACCATTTCGTCAAGGACGGGGCCGAGTCCCAGTCTTGTCTACCAGGGGTCTACGC
 5' pCMV LTR

5' GTCCCGCCCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTGCCCCAAGGACCTGAAATGACCCTGTGCCTTATTTGAACTAACCAATCAGTTC
 300
 3' CAGGGCCGGGAGTCTGCAAGATCTCTTGGTAGTCTACAAAGTCCACGGGGTTCCTGGACTTTACTGGGACACGGAATAAACTTGATTGGTTAGTCAAG
 5' pCMV LTR

5' GCTTCTCGTCTCTGTTCGCGCCTTCTGCTCCCCGAGCTCAATAAAAAGAGCCACAACCCCTCACTCGGCGCGCAGTCTCCGATAGACTGCGTCCCC
 400
 3' CGAAGAGCGAAGACAAGCGCGGAAGACGAGGGGCTCGAGTTATTTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTGAGGAGGCTATCTGACGCAGCGGG
 5' pCMV LTR

5' GGGTACCCGTATTCCCAATAAAGCCTCTTGCTGTTTGCATCCGAATCGTGGACTCGCTGATCCTTGGGAGGGTCTCCTCAGATTGATTGACTGCCACCT
 500
 3' CCCATGGGCATAAGGGTTATTTTCGGAGAACGACAAACGTAGGCTTAGCACCTGAGCGACTAGGAACCCCTCCAGAGGAGTCTAACTAACTGACGGGTGGA
 5' pCMV LTR

5' CGGGGTCTTTTCAATTTGGAGGTTCCACCGAGATTGGAGACCCCTGCCAGGGACCACCGACCCCCCGCGGGAGGTAAGCTGGCCAGCGGTCTGTTTCG
 600
 3' GCCCCAGAAAGTAAACCTCCAAGGTGGCTCTAAACCTCTGGGGACGGGTCCCTGTTGGCTGGGGGGCGGCCCTCCATTCGACCGGTGCGCAGCAAAGC
 5' pCMV LTR

Pack Signal

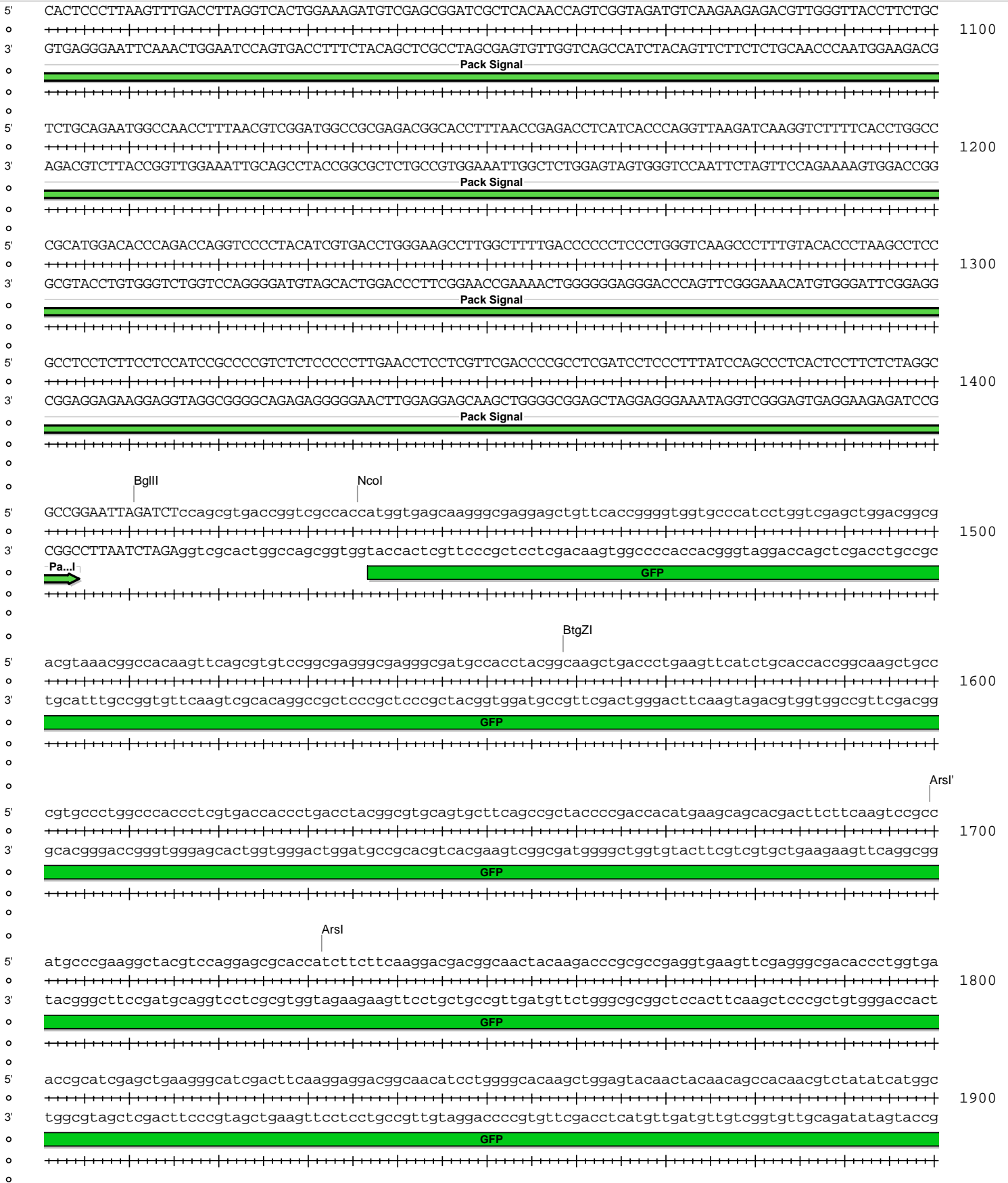
5' TGTCTGTCTCTGTCTTGTGCGTGTGTGCGCCGATCTAATGTTTGGCCTGCGTCTGTACTAGTTAGCTAACTAGCTCTGTATCTGGCGGACCCGTGG
 700
 3' ACAGACAGAGACAGAAACACGCACAAACACGGCCGTAGATTACAAACCGCGACGCAGACATGATCAATCGATTGATCGAGACATAGACCGCTGGGCACC
 Pack Signal

5' TGGAATGACGAGTTCTGAACACCCGGCCGCAACCTGGGAGACGTCCCAGGGACTTTGGGGCCGTTTGTGGCCCGACCTGAGGAAGGGAGTCGATG
 800
 3' ACCTTGACTGCTCAAGACTTGTGGGCCGGCGTTGGGACCTCTGCAGGGTCCCTGAAACCCCGGCAAAAACACCGGGCTGGACTCCTTCCTCAGCTAC
 Pack Signal

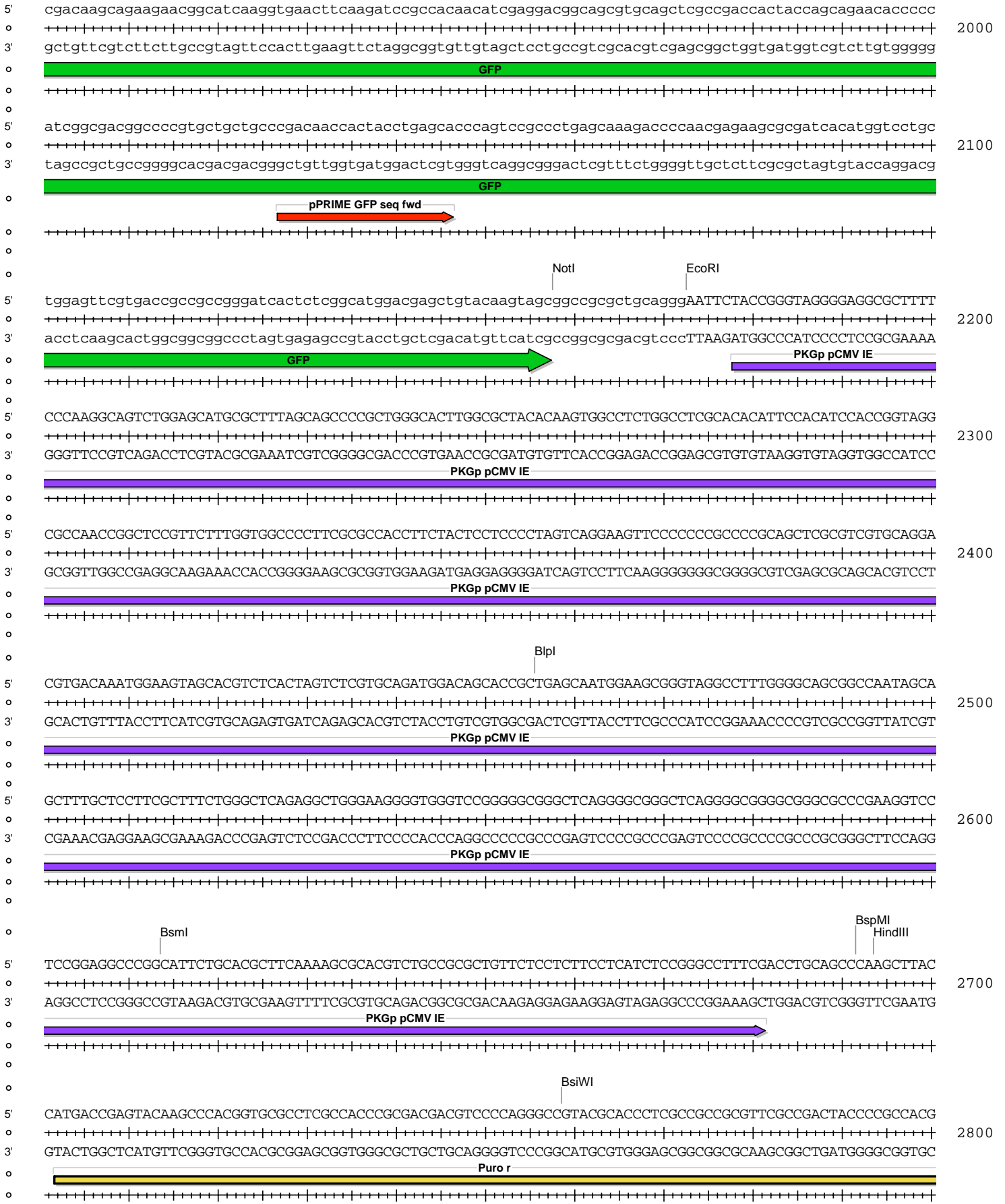
5' TGGAATCCGACCCGTCAGGATATGTGGTTCTGGTAGGAGACGAGAACC'TAAACAGTTCCCGCCTCCGTCTGAATTTTGTCTTTCGGTTTGAACCGAA
 900
 3' ACCTTAGGCTGGGGCAGTCTTATACACCAAGACCATCCTCTGCTCTTGGATTTTGTCAAGGGCGGAGGCAGACTTAAAAACGAAAGCCAAACCTTGGCTT
 Pack Signal

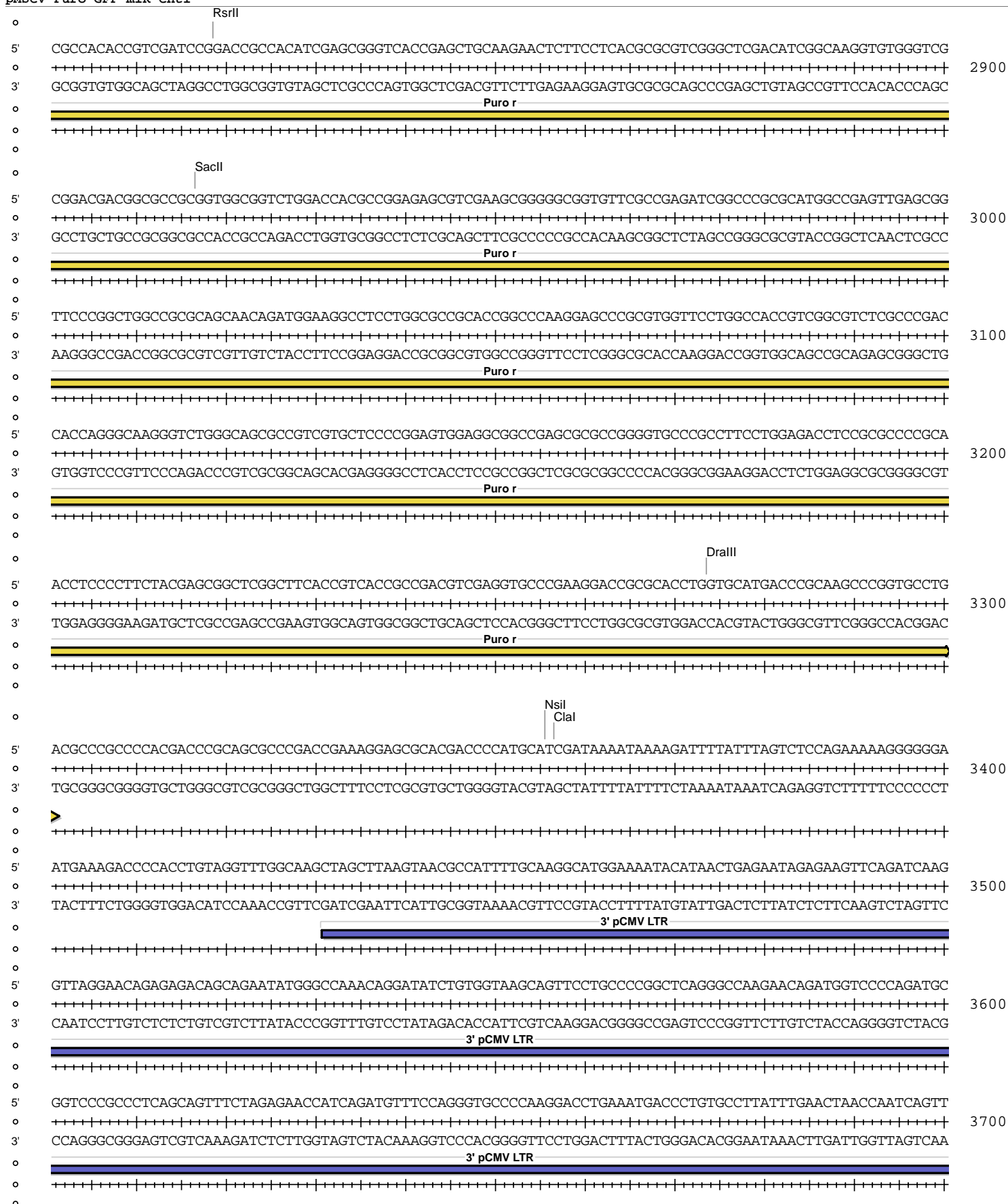
5' GCCGCGCTCTGTCTGCTGCAGCGCTGCAGCATCGTTCGTGTGTCTCTGTCTGACTGTGTTTCTGTATTTGTCTGAAAATTAGGGCCAGACTGTTAC
 1000
 3' CGGCGCGCAGAACAGACGACGTCGCGACGTCGTAGCAAGACACAACAGAGACAGACTGACACAAAGACATAAACAGACTTTTAATCCCGGTCTGACAATG
 Pack Signal

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5' CGCTTCTCGCTTCTGTTCGCGCGCTTCTGCTCCCGAGCTCAATAAAAGAGCCACAACCCCTCACTCGGCGCGCCAGTCTCCGATAGACTGCGTCGCC
 3' GCGAAGAGCGAAGACAAGCGCGGAAGACGAGGGGCTCGAGTTATTTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTTCAGGAGGCTATCTGACGCAGCGG
 3' pCMV LTR

5' CCGGTACCCGTGTATCCAATAAACCTTTCGAGTTGCATCCGACTTGTGGTCTCGTGTTCCTTGGGAGGGTCTCCTCTGAGTGATTGACTACCCGTCA
 3' GCCCATGGGCACATAGGTTATTTGGGAGAACGTCAACGTAGGCTGAACACCAGAGCGACAAGGAACCCCTCCAGAGGAGACTACTAAGTATGATGGGCAGT
 3' pCMV LTR

5' GCGGGGTCTTTCATGGGTAACAGTTTCTTGAAGTTGGAGAACAACATTCTGAGGGTAGGAGTCAATATTAAGTAATCCTGACTCAATTAGCCACTGTT
 3' CGCCCCAGAAAGTACCCATTGTCAAAGAACTCAACCTCTTGTGTGAAGACTCCCATCTCAGCTTATAATTCATTAGGACTGAGTTAATCGGTGACAA
 3' pCMV LTR

5' TTGAATCCACATACTCCAATACTCCTGAAATAGTTTCAATTATGGACAGCGCAGAAGAGCTGGGGAGAATTAATTCGTAATCATGGTCATAGCTGTTTCTG
 3' AACTTAGGTGTATGAGGTTATGAGGACTTTATCAAGTAATACCTGTGCGCTTCTCGACCCCTCTTAATTAAGCATTAGTACCAGTATCGACAAAGGAC

5' TGTGAAATTGTTATCCGCTCACAATCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAAT
 3' ACACTTTAAACAATAGCGAGTGTAAAGGTGTGTGTATGCTCGGCCTTCGTATTTCACATTTTCGACCCACCGATTACTCACTCGATTGAGTGTAAATTA

5' TGCGTTGCGCTCACTGCCCGCTTCCAGTCGGGAAACCTGTGCTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGCCTATTGGG
 3' ACGCAACGCGAGTGACGGGCGAAAGGTGAGCCCTTTGGACAGCACGGTCGACGTAATTACTTAGCCGTTGCGCGCCCTCTCCGCCAACGCATAACCC

5' CGCTCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTGCTTCCGGTGCGGCGAGCGGTATCAGCTCACTCAAAGCGGTAATACGGTTATCCACAG
 3' GCGAGAAGGCGAAGGAGCGAGTGACTGAGCGACGCGAGCCAGCAAGCCGACCGCTCGCCATAGTCGAGTGAGTTTCCGCCATTATGCCAATAGGTGTC

PciI
AflIII

5' AATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCG
 3' TTAGTCCCCTATTGCGTCTTTCTTGTACACTCGTTTTTCCGGTCTTTTCCGGTCTTGGCATTTTTTCCGGCGCAACGACCAGCAAAAAGGTATCCGAGGC

5' CCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTC
 3' GGGGGACTGCTCGTAGTGTTTTAGCTGCGAGTTCAGTCTCCACCGCTTTGGGCTGTCTGATATTTCTATGGTCCGCAAAGGGGACCTTCGAGGGAG

5' GTGCGCTCTCTGTTCCGACCTGCGCTTACCGGATACTGTCCGCTTTTCTCCCTTCGGGAAGCGTGGCGCTTTTCTCATAGCTCAGCTGTAGGTATC
 3' CACGCGAGAGGACAAGGCTGGGACGGCGAATGGCCTATGGACAGGCGGAAAGAGGGAAGCCCTTCGCACCGCGAAAGAGTATCGAGTGCGACATCCATAG

5' TCAGTTCGGTGTAGGTGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTC
 3' AGTCAAGCCACATCCAGCAAGCGAGGTTTCGACCCGACACAGTGTTCGGGGGCAAGTTCGGGCTGGCGACGCGGAATAGGCCATTGATAGCAGAATCAG

5' CAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGG
 3' GTTGGGCCATTCTGTGCTGAATAGCGGTGACCGTCTGCGTGACCATTGTCTAATCGTCTCGCTCCATACATCCGCCACGATGTCTCAAGAACTTCACC

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5' TGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCA
 0 ++++++
 3' ACCGGATTGATGCCGATGTGATCTTCTGTGCATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTCTCAACCATCGAGAACTAGGCCGT
 0 ++++++ 5000

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

5' GTCTGACGCTCAGTGAACGAAAACCTACGTTAAGGGATTTGGTTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTAATAATGAAGT
 0 ++++++
 3' CAGACTGCGAGTACCTTGTCTTTGAGTGCAATTCCTTAAAACAGTACTTAATAGTTTTTTCTAGAGTGGATCTAGGAAAATTAATTTTACTTCA
 0 ++++++ 5200

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

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

5' GGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGC
 0 ++++++
 3' CCGAGGTCTAAATAGTCGTTATTTGGTGGTCCGCTTCCCGGCTCGCGTCTTACCAGGACGTTGAAATAGGCGGAGGTAGGTGAGATAATTAACAACG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5500

5' CGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTT
 0 ++++++
 3' GCCCTTCGATCTCATTTCATCAAGCGGTCAATTAACAACGCGTTGCAACAACGGTAACGATGTCCGTAGCACCACAGTGGAGCAGCAAACCATACCGAA
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5600

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

5' TAAGTTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTTACTGTTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAAGTAC
 0 ++++++ Scal
 3' ATTCAACCGCGCTCACAATAGTGAAGTACCAATACCGTCTGACGTTAAGAGAATGACAGTACGGTAGGCATTCTACGAAAAGACTGACCCTCATG
 0 ++++++
 0 ++++++ Amp Res
 0 ++++++ 5800

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

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

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5' TTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATA
 6100
 3' AAGTCGTAGAAAATGAAAAGTGGTCGCAAAAGACCCACTCGTTTTTGTCTTCCGTTTTTACGGCGTTTTTCCCTTATTCCCGCTGTGCCTTTACAACCTAT
 Amp Res

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

5' GGGTTCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAAATAGGCGTATCACGAGGCCCTT
 6300
 3' CCCAAGGCGCGTGTAAGGGGCTTTTACGGTGGACTGCAGATTCCTTGGTAATAATAGTACTGTAATTGGATATTTTTATCCGCATAGTGCTCCGGGAA

5' TCGTCTCGCGCTTTCCGGTGTGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAA
 6400
 3' AGCAGAGCGCGCAAGCCACTACTGCCACTTTTGGAGACTGTGTACGTGAGGGCTCTGCCAGTGTGAAACAGACATTGCCTACGGCCCTCGTCTGTT

5' GCCCGTCAGGGCGCGTCAGCGGGTGTGGCGGGTGTGCGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGACTGAGAGTGCACCATATGCGGTGTG
 6500
 3' CGGGCAGTCCCAGCGCAGTCGCCACAAACCGCCACAGCCCGACCGAATTGATACGCCGTAGTCTCGTCTAACATGACTCTCACGTGGTATACGCCACAC
 Ndel

5' AAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCCATTTCGCCATTTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCTCTTC
 6600
 3' TTTATGGCGTGTCTACGCATTCTCTTTTATGGCGTAGTCCGCGTAAGCGGTAAGTCCGACGCGTTGACAACCTTCCCGCTAGCCACGCCCGGAGAAG

5' GCTATTACGCCAGCTGGCGAAAAGGGGATGTGCTGCAAGGCGATTAAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGACGGCGCAA
 6700
 3' CGATAATGCGGTGACCGCTTTCCCGCTACACGACGTTCCGCTAATTCAACCCATTGCGGTCCCAAAAGGGTCAGTGCTGCAACATTTGCTGCCGCGTT

5' GGAATGGTGCATGCAAGGAGATGGCGCCAACAGTCCCCGGCCACGGGGCTGCCACCATACCCACGCCGAAACAAGCGCTCATGAGCCCGAAGTGGCG
 6800
 3' CCTTACCACGTACGTTCTCTACCGCGGTTGTGAGGGGCGGTTGCCCGGACGGTGGTATGGGTGCGGCTTTGTTGCGGAGTACTCGGGCTTACCCGC
 SgrAI

5' AGCCCGATCTTCCCCATCGGTGATGTGCGCGATATAGGCGCCAGCAACCGCACCTGTGGCGCCGGTGTGATGCCGCGCCACGATGCGTCCGGCGTAGAGGCGA
 6900
 3' TCGGGCTAGAAGGGGTAGCCACTACAGCCGCTATATCCGCGGTGCTGGCGTGGACACCGCGCCACTACGGCCGGTGTACGCAGGCCGCATCTCCGCT

5' TTAGTCCAATTTGTTAAAGACAGGATATCAGTGGTCCAGGCTCTAGTTTTGACTCAACAATATCACCAGCTGAAGCCTATAGAGTACGAGCCATAGATAA
 7000
 3' AATCAGGTTAAACAATTTCTGTCTTATAGTACCAGGTCGAGATCAAACTGAGTTGTTATAGTGGTGCAGTTCGGATATCTCATGCTCGGTATCTATT

5' AATAAAAGATTTTATTTAGTCTCCAGAAAAGGGGGGAA
 7039
 3' TTATTTTCTAAAATAAATCAGAGGTCTTTTCCCCCTT