

Sequence1: 444bp

CGTTAGGGTCAATGCGGGTCGCTTCACTTACGCCAATGTCGTTttgacggctagctcagtcctaggtacagtg
ctagctactaGACCACCAGCGGGACCAGCCAAGCCCTGAGCTCATTAACACAGccaggcatcaataaa
acgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgctctactagagtcacactggctcaccttcgggtg
ggcctttctcggtttataaccaggcatcaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgct
ctctactagagtcacactggctcaccttcgggtgggcctttctgcgtttataTTCTTATGTGCCCTCCTCCCACCTCCTCTCC
CCAGACTTCATCGCCTTCTAGAGAAAGAG

CGTTAGGGTCAATGCGGGTCGCTTCACTTACGCCAATGTCGTT(HL)ttgacggctagctcagtcctaggtac
agtgtagctacta(Promoter) GACCACCAGCGGGACCAGCCAAGCCCTGAGCTCATTAACACAG(A)
ccaggcatcaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgctctactagagtcacac
tggctcaccttcgggtgggcctttctgcgtttata(B0015)ccaggcatcaataaaacgaaaggctcagtcgaaagactgggcctttcggt
ttatctgtgtttgtcggggaacgctctactagagtcacactggctcaccttcgggtgggcctttctgcgtttata(B0015)TTCTTATGT
GCCCTCCTCCCACCTCCTCTCCCAGACTTCATCGCCTTCT(B)AGAGAAAGAG(RBS)

Sequence2: 358bp

TCGCCTTCTGACCAAGATCGAGACGCTGCGCCTGGCCATCCGCTACATCccaggcatcaataaaac
gaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgctctactagagtcacactggctcaccttcgggtggg
cctttctcggtttataaccaggcatcaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgctct
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GCCTGCGGTTAGAGAAAGAG

TCGCCTTCT(B)GACCAAGATCGAGACGCTGCGCCTGGCCATCCGCTACATC(C)ccaggcatcaaat
aaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtcggggaacgctctactagagtcacactggctcaccttcgg
gtgggcctttctgcgtttata(B0015)ccaggcatcaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtgtttgtc
ggggaacgctctactagagtcacactggctcaccttcgggtgggcctttctgcgtttata(B0015)CTCAGTGAAGCAAGCCC
TCCCAGAGCTCAGGCCTGCGGTT(D)AGAGAAAGAG(RBS)

Sequence3:860bp

TtgggctagcACCTTAACAAACTACGGAGGTCAACatggccggcactcagcgtatcgtctttctacccgatactcagttgcc
tttcgagggcgcgcaaagagatgcaagcggcatccgctcatcggggatgcccagccgtacggcggtgacatatcgggtgacgctcctaga
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ggcagatgggcttcgggatgctcaggtcgcagggcaagcatgcaaggctgagatcgtcccgatcctgggaggcaagttcaccggtgac
ggccaggctcgggaagtcaccgggtcagcaaacgcgaaaactacgctgctGCTAAAtaataaccaggcatc

Ttgggctagc(pBADI0500-9bp)ACCTTAACAAACTACGGAGGTCAAC(RBS-

50000)atggccggcactcagcgtatcgtctttctacccgatactcagttgcctttcagggcgcgcaaagagatgcaagcggatccgctt
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Excisionase)gcagcaaacgcgaaaactacgctgctGCTAAAtaataa(AAK tag) ccaggcatc(B0015)

Sequence4: 426bp

AatgctagcGACCAAGATCGAGACGCTGCGCCTGGCCATCCGCTACATCGAATTCTCGGCCGGCT
TGTCGACGACGGCGGTCTCAGTGGTGTACGGTACAAACCCTCTAGGGCGGCGGATTTGTCCT
ACTCAGGAGAGCGTTCACCGACAAACAACAGATAAAAACGAAAGGCCAGTCTTTTCGACTGAGC
CTTTTCGTTTTATTTGATGCCTCTAGGGCGGCGGATTTGTCCTACTCAGGAGAGCGTTCACCGA
CAAACAACAGATAAAAACGAAAGGCCAGTCTTTTCGACTGAGCCTTTTCGTTTTATTTGATGCCGC
CCGGATGATCCTGACGACGGAGACCGCGGTGGTTGACCAGACAAACCACGATTCTTATGTGC
CCTCCTCCCACTCCTCTCCCCAGACTTCATCGCCTTCTaatgcatc

Aatgctagc(J23110)GACCAAGATCGAGACGCTGCGCCTGGCCATCCGCTACATC(C)GAATTC(Ec
oR1)TCGGCCGGCTTGTCGACGACGGCGGTCTCAGTGGTGTACGGTACAAACCC(attL)TCTAG
GGCGGCGGATTTGTCCTACTCAGGAGAGCGTTCACCGACAAACAACAGATAAAAACGAAAGGC
CCAGTCTTTTCGACTGAGCCTTTTCGTTTTATTTGATGCC(Terminator)TCTAGGGCGGCGGATTTG
TCCTACTCAGGAGAGCGTTCACCGACAAACAACAGATAAAAACGAAAGGCCAGTCTTTTCGACT
GAGCCTTTTCGTTTTATTTGATGCC(Terminator)GCCCGGATGATCCTGACGACGGAGACCGCG
GTGGTTGACCAGACAAACCACGA(attR)TTCTTATGTGCCCTCCTCCCACTCCTCTCCCCAGACT
TCATCGCCTTCT(B)aatgcatc(Int-RBS9bp)