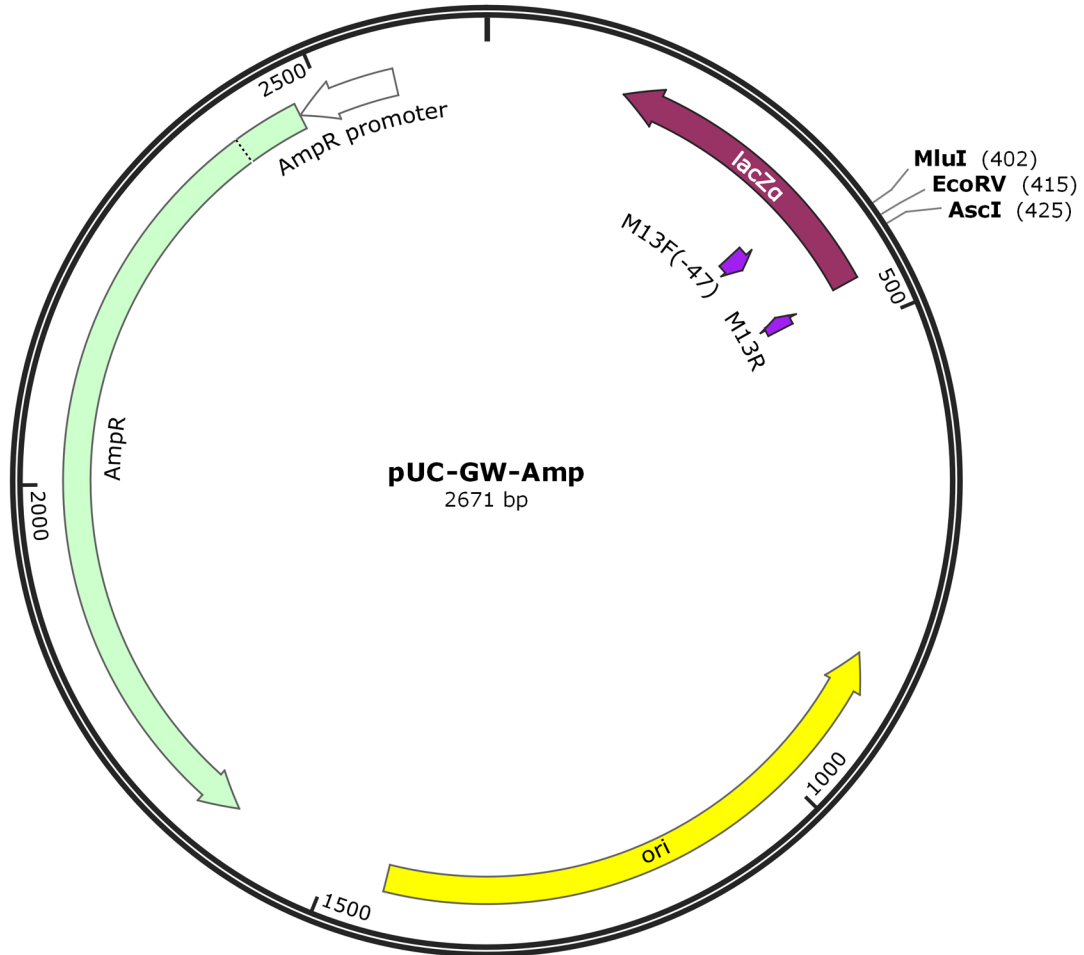
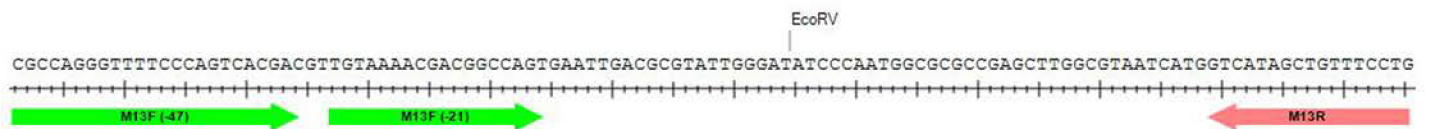


## pUC-GW-Amp Vector Map



### Cloning Site



M13F(-21): 5'-d(TGT AAA ACG ACG GCC AGT)-3'

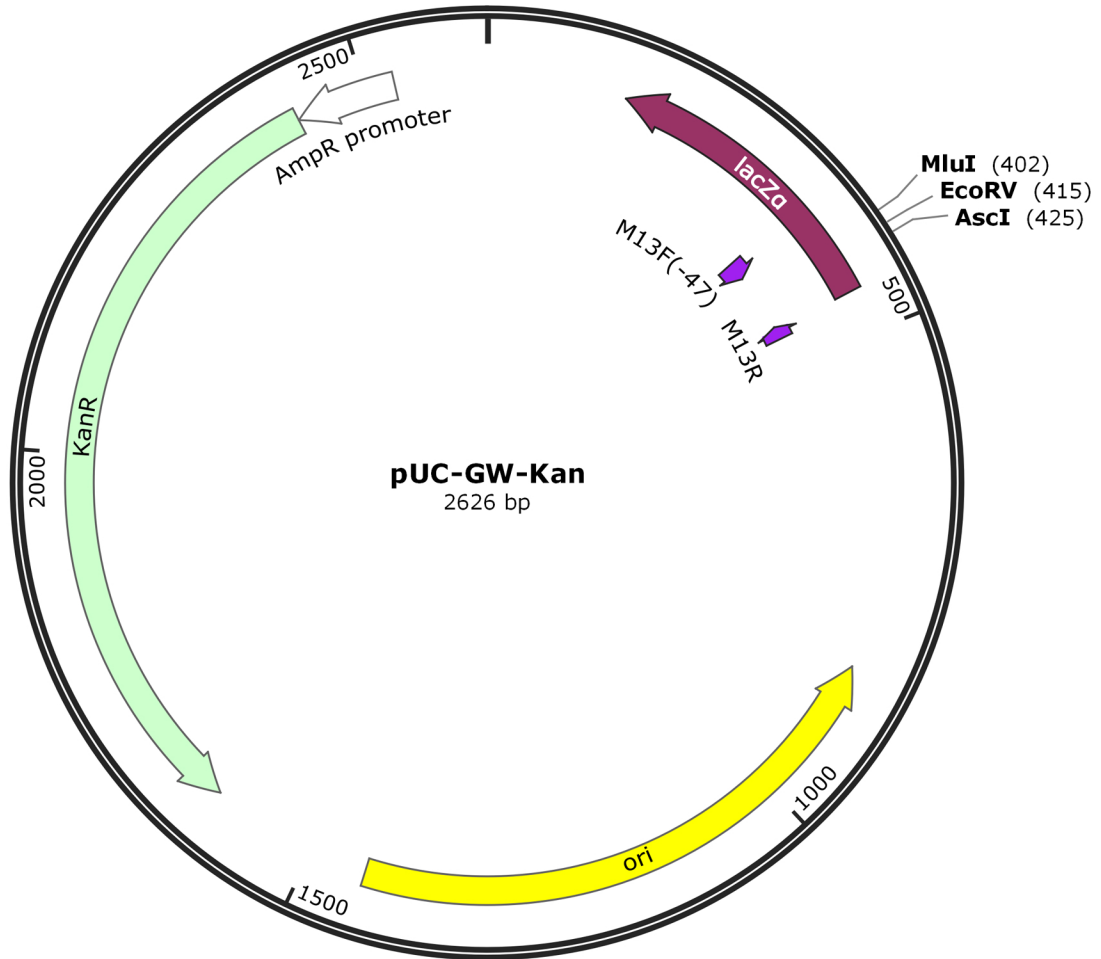
M13F(-47): 5'-d(CGC CAG GGT TTT CCC AGT CAC GAC)-3'

M13R: 5'-d(CAG GAA ACA GCT ATG AC)-3'

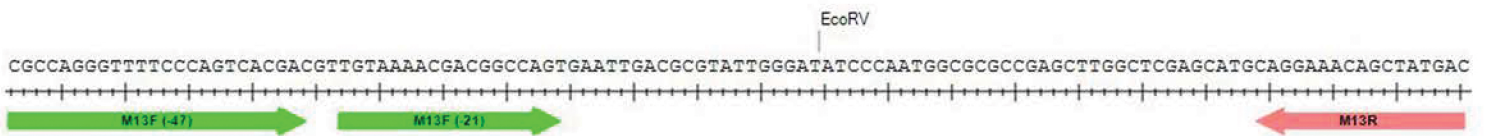
## pUC-GW-Amp Sequence (2671 bp):

TCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACTGTCACAGCTTGTCTGTAAGCGG  
ATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTGTGGCGGGTGTCCGGGGCTGGCTTAACTATGCCGGC  
ATCAGAGCAGATTGTACTGAGAGTGCACCATATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATC  
AGGCGCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAGCT  
GGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGAC  
GGCCAGTGAATTGACGCGTATTGGGATATCCCAATGGCGCGCCGAGCTTGGCGTAATCATGGTCATAGCTGTTTTCTGT  
GTGAAATTGTTATCCGCTCACAAATCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGA  
GTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGTTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAAT  
GAATCGGCCAACGCGCGGGGAGAGGGCGTTTTCGCTATTGGGCGCTGTTCCGCTTCTCGCTCACTGACTCGCTGCGC  
TCGGTCGTTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAAC  
GCAGGAAAGAACATGTGAGCAAAAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAGGCCGCGTTGCTGGCGTTTTCCAT  
AGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGA  
TACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCC  
TTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCA  
AGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACC  
CGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTA  
CAGAGTTCCTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGT  
TACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAG  
CAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTTCTACGGGGTCTGACGCTCAGTGAACG  
AAAACCTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTAATAAATGAAGTTT  
TAAATCAATCTAAAGTATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATC  
TGCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCC  
CAGTGCTGCAATGATACCGCGAGAACCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGC  
CGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGT  
TCGCCAGTTAATAGTTTTCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCGTTTGGTATGGCTT  
CATTAGCTCCGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGG  
TCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTACTG  
TCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCG  
AGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACCTTTAAAAGTGCTCATCATTGGAAAAC  
GTTCTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTG  
ATCTTCAGCATCTTTTACTTTACCCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCCAAAATGCCGCAAAAAGGGGAATA  
AGGGCGACACGGAAATGTTGAATACTCATACTCTTCTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGA  
GCGGATACATATTTGAATGTATTTAGAAAAATAAACAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC  
GTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTTGTG

## pUC-GW-Kan Vector Map



### Cloning Site



M13F(-21): 5'-d(TGT AAA ACG ACG GCC AGT)-3'  
M13F(-47): 5'-d(CGC CAG GGT TTT CCC AGT CAC GAC)-3'  
M13R: 5'-d(CAG GAA ACA GCT ATG AC)-3'

## pUC-GW-Kan Sequence (2626 bp):

TCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACTGTCACAGCTTGTCTGTAAGCGG  
ATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTGTGGCGGGTGTCCGGGGCTGGCTTAACTATGCCGGC  
ATCAGAGCAGATTGTACTGAGAGTGCACCATATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATC  
AGGCGCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAGCT  
GGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGAC  
GGCCAGTGAATTGACGCGTATTGGGATATCCCAATGGCGCGCCGAGCTTGGCTCGAGCATGGTCATAGCTGTTTTCTGT  
GTGAAATTGTTATCCGCTCACAAATCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGA  
GTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGTTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAAT  
GAATCGGCCAACGCGCGGGGAGAGGCGGTTTTCGCTATTGGGCGCTGTTCCGCTTCTCGCTCACTGACTCGCTGCGC  
TCGGTCTGTTCCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAAC  
GCAGGAAAGAACATGTGAGCAAAAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAGGCCGCGTTGCTGGCGTTTTTCCAT  
AGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGA  
TACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCC  
TTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCA  
AGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACC  
CGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTA  
CAGAGTTCCTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGT  
TACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAG  
CAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTTCTACGGGGTCTGACGCTCAGTGAACG  
AAAACCTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTAATAAATGAAGTTT  
TAAATCAATCTAAAGTATATGAGTAACTTGGTCTGACAGTTAGAAAAACTCATCGAGCATCAAATGAACTGCAATTTA  
TTCATATCAGGATTATCAATACCATATTTTTGAAAAAGCCGTTTCTGTAATGAAGGAGAAAACCTACCGAGGCAGTTCAT  
AGGATGGCAAGATCCTGGTATCGGTCTGCGATTCCGACTCGTCCAACATCAATACAACCTATTAATTTCCCCTCGTCAA  
AATAAGTTATCAAGTGAGAAATCACCATGAGTGACGACTGAATCCGGTGAGAATGGCAAAAAGTTTATGCATTTCTTTCC  
AGACTTGTTCAACAGGCCAGCCATTACGCTCGTCATCAAAATCACTCGCATCAACCAAACCGTTATTTCATTGATTGC  
GCCTGAGCGAAACGAAATACGCGATCGCTGTTAAAAGGACAATTACAAACAGGAATCGAATGCAACCGGCGCAGGAAC  
ACTGCCAGCGCATCAACAATATTTTACCTGAATCAGGATATTCTTCTAATACCTGGAATGCTGTTTTCCAGGGATCGCA  
GTGGTGAAGTAAACCATGCATCATCAGGAGTACGGATAAAATGCTTGATGGTCCGGAAGAGGCATAAATTCGTCAGCCAGT  
TTAGTCTGACCATCTCATCTGTAACATCATTGGCAACGCTACCTTTGCCATGTTTCAGAAACAACCTGGCGCATCGGGC  
TTCCCATACAATCGATAGATTGTGCGACCTGATTGCCCGACATTATCGCGAGCCATTTATACCCATATAAATCAGCATCCA  
TGTTGGAATTTAATCGCGGCCTAGAGCAAGACGTTTCCCGTTGAATATGGCTCATACTTCTCTTTTCAATATTATTGAA  
GCATTTATCAGGGTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAATAGGGGTTCCGCGCA  
CATTTCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGA  
GGCCCTTTTGTGTC