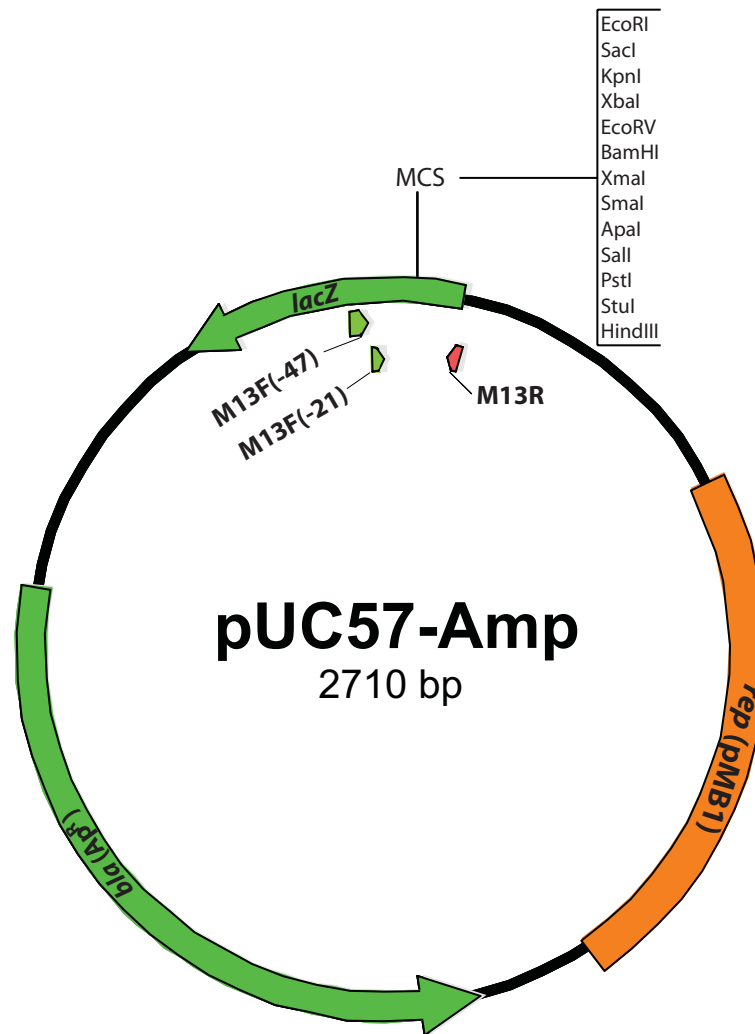
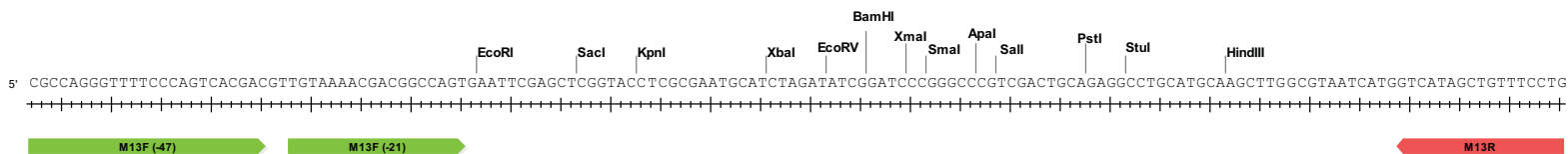


## pUC57-Amp Vector Map



### Multiple Cloning Site



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

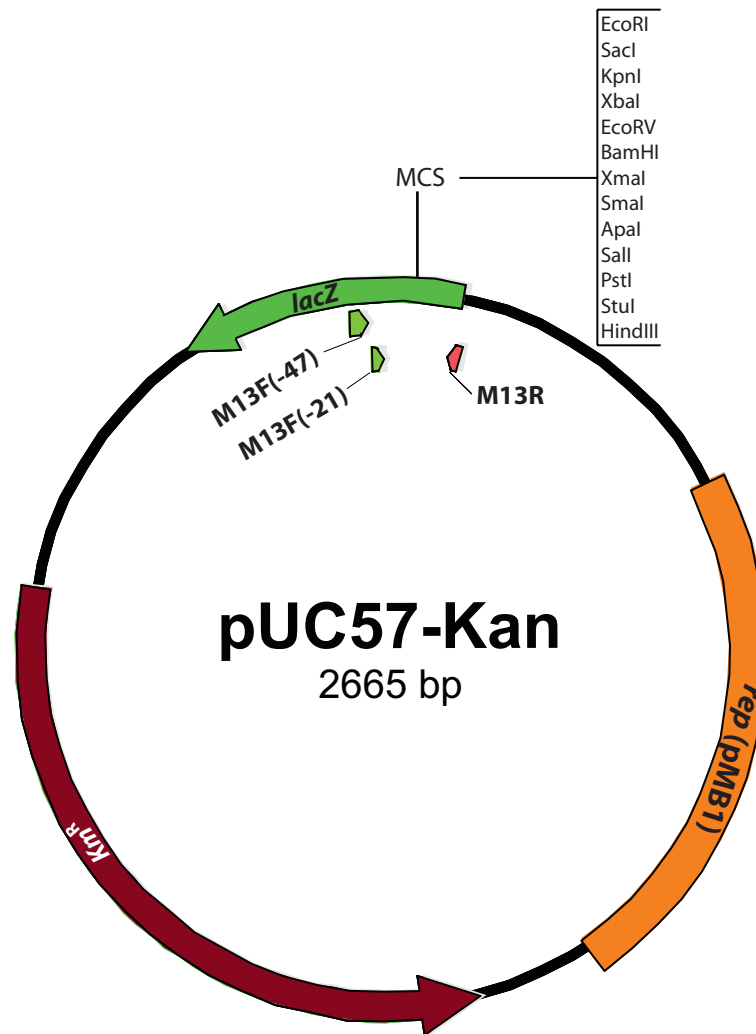
**M13F(-47): 5'-d(CGC CAG GGT TTT CCC AGT CAC GAC)-3'**

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

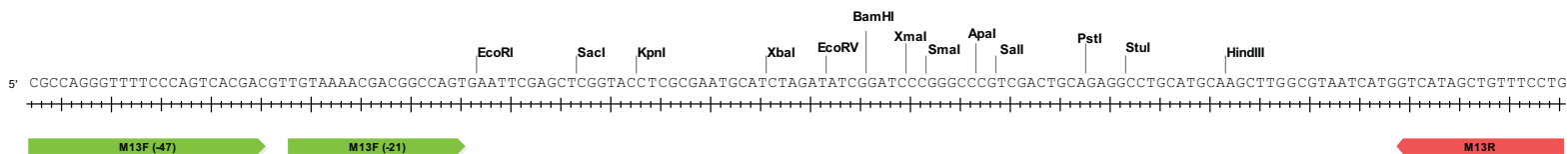
pUC57-Amp Sequence (2710 bp):

TCGCGCGTTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCA  
CAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTG  
TTGGCGGGTGTGCGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTIONGAGAGTGC  
ACCATATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAAATACCGCATCAGGCGCC  
ATTCGCCATTAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTAT  
TACGCCAGCTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGT  
TTTCCCAGTCACGACGTTGTAAAACGACGGCCAGTGAATTCGAGCTCGGTACCTCGCGAA  
TGCATCTAGATATCGGATCCCGGGCCCGTGCAGTGCAGAGGCCTGCATGCAAGCTTGGCG  
TAATCATGGTCATAGCTGTTTTCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAAC  
ATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACA  
TTAATTGCGTTGCGCTCACTGCCCCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCAT  
TAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGGCGTATTGGGCGCTCTTCCGCTTCC  
TCGCTCACTGACTCGCTGCGCTCGGTCGTTTCGGCTGCGGCGAGCGGTATCAGCTCACTCA  
AAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCA  
AAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTTCCATAGG  
CTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAAACCCG  
ACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTT  
CCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTT  
TCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGC  
TGTGTGCACGAACCCCCCGTTACGCCCAGCGCTGCGCCTTATCCGGTAACATATCGTCTT  
GAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATT  
AGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCCTGAAGTGGTGGCCTAACTACGGC  
TACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAA  
AGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTTGTT  
TGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCT  
ACGGGGTCTGACGCTCAGTGGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGAGATTA  
TCAAAAAGGATCTTCACCTAGATCCTTTTAAATTA AAAATGAAGTTTTAAATCAATCTAA  
AGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATC  
TCAGCGATCTGTCTATTTGTTTCATCCATAGTTGCCCTGACTCCCCGTCGTGTAGATAACT  
ACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGC  
TCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGT  
GGTCTTGC AACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTA  
AGTAGTTCCCGAGTTAATAGTTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTG  
TCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGTTCCCAACGATCAAGGCGAGTT  
ACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTC  
AGAAGTAAGTTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTT  
ACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTC  
TGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACC  
GCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTTGGAAAACGTTCTTCGGGGCGAAAA  
CTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAAC  
TGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAA  
AATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAAATGTTGAATACTCATACTCTTCCTT  
TTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAA  
TGTATTTAGAAAAATAAACA AATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCT  
GACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCAGGAG  
CCCTTTCGTC

# pUC57-Kan Vector Map



## Multiple 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'**

pUC57-Kan Sequence (2665 bp):

TCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACA  
GCTTGTCGTAAAGCGGATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTGTG  
GCGGGTGTTCGGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCATA  
TGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCCATTCGCCAT  
TCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAGCTG  
GCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTTTTCCCAGTCACG  
ACGTTGTAAAACGACGGCCAGTGAATTCGAGCTCGGTACCTCGCGAATGCATCTAGATATCGG  
ATCCCGGGCCCCGTCGACTGCAGAGGCCGTCATGCAAGCTTGGCGTAATCATGGTCATAGCTGT  
TTCCGTGTGAAATGTTATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTG  
TAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATGCGTTGCGCTCACTGCCCCG  
TTTTCCAGTCGGGAAACCTGTGCTGCCAGCTGCATTAATGAATCGGCCAACGCGGGGAGAG  
GCGGTTTTGCGTATTGGGCGCTCTTCCGCTTCCGCTCACTGACTCGCTGCGCTCGGTCGTTT  
GGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGG  
GATAACGCAGGAAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAG  
GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGC  
TCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCCCTGGAAG  
CTCCCTCGTGCGCTCTCCGTTCGACCCCTGCCGCTTACCGGATACTGTCCGCTTTCTCCCTT  
CGGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTC  
GCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTA  
ACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTA  
ACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAAC  
TACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGA  
AAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTT  
TGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACG  
GGGTCTGACGCTCAGTGGAAACGAAAACCTACGTTAAGGGATTTTGGTCATGAGATTATCAAAA  
AGGATCTTCACCTAGATCCTTTTAAATTAATAATGAAGTTTAAATCAATCTAAAGTATATATGA  
GTAAACTTGGTCTGACAGTTAGAAAAACTCATCGAGCATCAAATGAACTGCAATTTATTCATA  
TCAGGATTATCAATACCATATTTTTGAAAAAGCCGTTTTCTGTAATGAAGGAGAAAACTCACCGA  
GGCAGTTCCATAGGATGGCAAGATCCTGGTATCGGTCTGCGATTCGACTCGTCCAACATCAAT  
ACAACCTATTAATTTCCCTCGTCAAAAATAAGGTATCAAGTGAGAAATCACCATGAGTGACG  
ACTGAATCCGGTGAGAATGGCAAAGTTTTATGCATTTCTTTCCAGACTTGTTCACAGGCCAG  
CCATTACGCTCGTCATCAAATCACTCGCATCAACCAAACCGTTATTCATTCGTGATGCGCCTG  
AGCGAGACGAAATACGCGATCGCTGTAAAAGGACAATTACAAACAGGAATCGAATGCAACC  
GGCGCAGGAACACTGCCAGCGCATCAACAATATTTTCCCTGAATCAGGATATCTTCTAATAC  
CTGGAATGCTGTTTTCCCAGGGATCGCAGTGGTGAGTAACCATGCATCATCAGGAGTACGGAT  
AAAATGCTTGATGGTTCGGAAGAGGCATAAATTCGTCAGCCAGTTTAGTCTGACCATCTCATCT  
GTAACATCATGGCAACGCTACCTTTGCCATGTTTCAGAAACAACCTCGGCGCATCGGGCTTC  
CCATACAATCGATAGATTGTCGCACCTGATGCCCCGACATATTCGCGAGCCCATTTATACCCATAT  
AAATCAGCATCCATGTTGGAATTTAATCGCGGCC TAGAGCAAGACGTTTCCCGTTGAATATGGC  
TCATACTCTTCCTTTTTCAATAT TATGAAGCATTTATCAGGGTTATGTCTCATGAGCGGATACA  
TATTTGAATGTATTTAGAAAAATAAACAATAAGGGTTCCGCGCACATTTCCCGAAAAGTGCC  
ACCTGACGCTTAAGAAACCATTAT TATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGC  
CCTTTTCGTC