Gene Sequence(s) details

ApE plasmid files has the details for the sequences.

Legend: **TAATACGACTCACTATAGGGG-** T7 Promoter sequence

**AAGGAG-** RBS

**AGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTG-** T7 terminator

Gene- Gene of interest

Operator- OCueR operator

1. T7-CueR (**CueR** gene from NCBI)

T7-OCueR-Venus (OCueR sequence from NCBI- T7 promoter, terminator, RBS, Venus sequences from previous work of Abhinav)

AGACTATCGCACCATCAGCCAGAAAACCGAATTTTGCTGGGTGGGCTAACGATATCCGCCTGATGCGTGAACGTGACGGACGTAACCACCGCGACATGTGTGTGCTGTTCCGCTGGGCATGCAAT**TAATACGACTCACTATAGGGG**AGACCACAACGGTTTCCCTCTAGAAATAATTTTGTTTAACTTTAAG**AAGGAG**ATATACATATGAACATCAGCGATGTAGCAAAAATTACCGGCCTGACCAGCAAAGCCATTCGCTTCTATGAAGAGAAGGGGCTGGTGACGCCGCCGATGCGCAGCGAAAACGGTTATCGCACCTACACGCAGCAGCATCTCAACGAACTGACCTTACTGCGCCAGGCACGGCAGGTGGGCTTTAACCTGGAAGAGAGCGGCGAGCTGGTGAATCTGTTTAACGACCCGCAGCGGCACAGCGCCGACGTCAAACGGCGCACGCTGGAGAAGGTGGCGGAGATCGAACGACACATTGAGGAGCTGCAATCCATGCGCGACCAGCTGCTGGCACTGGCGAATGCCTGCCCTGGCGATGACAGCGCCGACTGCCCGATTATCGAAAATCTCTCCGGCTGCTGTCATCATCGGGCAGGGTGAGGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAAC**TAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTG**CTGAAAGGAGGAACTATATCCGGATATCCACAGGACGGGTGTGGTCGCCATGATCGCGTAGTCGAGCAGCCCAGTAGTAGGTTGAGGCCGTTGAGCACCGCCGCCGCAAGGAATGGTGCATGCAA

1. T7-OCueR-Venus

AGACTATCGCACCATCAGCCAGAAAACCGAATTTTGCTGGGTGGGCTAACGATATCCGCCTGATGCGTGAACGTGACGGACGTAACCACCGCGACATGTGTGTGCTGTTCCGCTGGGCATGCAAT**TAATACGACTCACTATAGGGG**TTGACCTTCCCCTTGCTGGAAGGTTTAACCTAGACCACAACGGTTTCCCTCTAGAAATAATTTTGTTTAACTTTAAG**AAGGAG**ATATACATATGAGCAAAGGCGAAGAACTGTTCACGGGTGTGGTTCCGATCCTGGTTGAACTGGATGGCGATGTGAACGGTCATAAATTTAGCGTGTCTGGTGAAGGCGAAGGTGATGCGACCTACGGCAAACTGACGCTGAAACTGATTTGCACCACGGGTAAACTGCCGGTTCCGTGGCCGACCCTGGTGACCACGCTGGGTTATGGTCTGATGTGTTTCGCACGTTACCCGGATCACATGAAACGCCATGATTTCTTTAAATCTGCGATGCCGGAAGGCTATGTGCAGGAACGTACCATCTTTTTCAAAGATGATGGTAACTACAAAACCCGCGCGGAAGTTAAATTTGAAGGCGATACGCTGGTGAACCGTATTGAACTGAAAGGTATCGATTTCAAAGAAGATGGCAATATTCTGGGTCACAAACTGGAATACAACTACAACAGTCATAACGTGTACATTACCGCCGATAAACAGAAAAACGGTATCAAAGCAAACTTCAAAATCCGTCACAACATCGAAGATGGCGGTGTTCAGCTGGCCGATCATTACCAGCAGAACACCCCGATTGGCGATGGTCCGGTGCTGCTGCCGGATAATCATTATCTGAGTTACCAGAGCGCGCTGTCTAAAGATCCGAATGAAAAACGCGATCACATGGTTCTGCTGGAATTTGTGACCGCGGCCGGCATTACGCATGGTATGGATGAACTGTATAAATAAGGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAAC**TAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTG**CTGAAAGGAGGAACTATATCCGGATATCCACAGGACGGGTGTGGTCGCCATGATCGCGTAGTCGAGCAGCCCAGTAGTAGGTTGAGGCCGTTGAGCACCGCCGCCGCAAGGAATGGTGCATGCAA

mRNA probes and primer sequences

1. For Venus- used previous probe and primer sequences from the 2023 paper

CueR probe and primers for qPCR- generated sequences from IDT PrimerQuest

Forward: GCGAGCTGGTGAATCTGTTTA

Reverse: GGATTGCAGCTCCTCAATGT

Probe: AAGGTGGCGGAGATCGAACGAC