**pCas-Scramble**, version 12/05/2018

GAATTCCCCAGTGGAAAGACGCGCAGGCAAAACGCACCACGTGACGGAGCGTGACCGCGCGCCGAGCGCGCGCCAAGGTCGGGCAGGAAGAGGGCCTATTTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCTGTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGTACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTATGTTTTAAAATGGACTATCATATGCTTACCGTAACTTGAAAGTATTTCGATTTCTTGGGTTTATATATCTTGTGGAAAGGACGCGGGATCGCACTACCAGAGCTAACTCAGTTTTAGAGCTAGAAATAGCAAGTTAAAATAAGGCTAGTCCGTTATCAACTTGAAAAAGTGGCACCGAGTCGGTGCTTTTTTTGGTGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGAACCGGTACCGAGGAGATCTGCCGCCGCGATCGCCATGGATAAGAAATACTCAATAGGACTGGATATTGGCACAAATAGCGTCGGATGGGCTGTGATCACTGATGAATATAAGGTTCCTTCTAAAAAGTTCAAGGTTCTGGGAAATACAGACCGCCACAGTATCAAAAAAAATCTTATAGGGGCTCTTCTGTTTGACAGTGGAGAGACAGCCGAAGCTACTAGACTCAAACGGACAGCTAGGAGAAGGTATACAAGACGGAAGAATAGGATTTGTTATCTCCAGGAGATTTTTTCAAATGAGATGGCCAAAGTGGATGATAGTTTCTTTCATAGACTTGAAGAGTCTTTTTTGGTGGAAGAAGACAAGAAGCATGAAAGACATCCTATTTTTGGAAATATAGTGGATGAAGTTGCTTATCACGAGAAATATCCAACTATCTATCATCTGAGAAAAAAATTGGTGGATTCTACTGATAAAGCCGATTTGCGCCTGATCTATTTGGCCCTGGCCCACATGATTAAGTTTAGAGGTCATTTTTTGATTGAGGGCGATCTGAATCCTGATAATAGTGATGTGGACAAACTGTTTATCCAGTTGGTGCAAACCTACAATCAACTGTTTGAAGAAAACCCTATTAACGCAAGTGGAGTGGATGCTAAAGCCATTCTTTCTGCAAGATTGAGTAAATCAAGAAGACTGGAAAATCTCATTGCTCAGCTCCCCGGTGAGAAGAAAAATGGCCTGTTTGGGAATCTCATTGCTTTGTCATTGGGTTTGACCCCTAATTTTAAATCAAATTTTGATTTGGCAGAAGATGCTAAACTCCAGCTTTCAAAAGATACTTACGATGATGATCTGGATAATCTGTTGGCTCAAATTGGAGATCAATATGCTGATTTGTTTTTGGCAGCTAAGAATCTGTCAGATGCTATTCTGCTTTCAGACATCCTGAGAGTGAATACTGAAATAACTAAGGCTCCCCTGTCAGCTTCAATGATTAAACGCTACGATGAACATCATCAAGACTTGACTCTTCTGAAAGCCCTGGTTAGACAACAACTTCCAGAAAAGTATAAAGAAATCTTTTTTGATCAATCAAAAAACGGATATGCAGGTTATATTGATGGCGGCGCAAGCCAAGAAGAATTTTATAAATTTATCAAACCAATTCTGGAAAAAATGGATGGTACTGAGGAACTGTTGGTGAAACTGAATAGAGAAGATTTGCTGCGCAAGCAACGGACCTTTGACAACGGCTCTATTCCCCATCAAATTCACTTGGGTGAGCTGCATGCTATTTTGAGAAGACAAGAAGACTTTTATCCATTTCTGAAAGACAATAGAGAGAAGATTGAAAAAATCTTGACTTTTAGGATTCCTTATTATGTTGGTCCATTGGCCAGAGGCAATAGTAGGTTTGCATGGATGACTCGGAAGTCTGAAGAAACAATTACCCCATGGAATTTTGAAGAAGTTGTCGATAAAGGTGCTTCAGCTCAATCATTTATTGAACGCATGACAAACTTTGATAAAAATCTTCCAAATGAAAAAGTGCTGCCAAAACATAGTTTGCTTTATGAGTATTTTACCGTTTATAACGAATTGACAAAGGTCAAATATGTTACTGAAGGAATGAGAAAACCAGCATTTCTTTCAGGTGAACAGAAGAAAGCCATTGTTGATCTGCTCTTCAAAACAAATAGGAAAGTGACCGTTAAGCAACTGAAAGAAGATTATTTCAAAAAAATAGAATGTTTTGATAGTGTTGAAATTTCAGGAGTTGAAGATAGATTTAATGCTTCACTGGGTACATACCATGATTTGCTGAAAATTATTAAAGATAAAGATTTTTTGGATAATGAAGAAAATGAAGACATCCTGGAGGATATTGTTCTGACATTGACCCTGTTTGAAGATAGGGAGATGATTGAGGAAAGACTTAAAACATACGCTCACCTCTTTGATGATAAGGTGATGAAACAGCTTAAAAGACGCAGATATACTGGTTGGGGAAGGTTGTCCAGAAAATTGATTAATGGTATTAGGGATAAGCAATCTGGCAAAACAATACTGGATTTTTTGAAATCAGATGGTTTTGCCAATCGCAATTTTATGCAGCTCATCCATGATGATAGTTTGACATTTAAAGAAGACATCCAAAAAGCACAAGTGTCTGGACAAGGCGATAGTCTGCATGAACATATTGCAAATCTGGCTGGTAGCCCTGCTATTAAAAAAGGTATTCTCCAGACTGTGAAAGTTGTTGATGAATTGGTCAAAGTGATGGGGCGGCATAAGCCAGAAAATATCGTTATTGAAATGGCAAGAGAAAATCAGACAACTCAAAAGGGCCAGAAAAATTCCAGAGAGAGGATGAAAAGAATCGAAGAAGGTATCAAAGAACTGGGAAGTCAGATTCTTAAAGAGCATCCTGTTGAAAATACTCAATTGCAAAATGAAAAGCTCTATCTCTATTATCTCCAAAATGGAAGAGATATGTATGTGGACCAAGAACTGGATATTAATAGGCTGAGTGATTATGATGTCGATCACATTGTTCCACAAAGTTTCCTTAAAGACGATTCAATAGACAATAAGGTCCTGACCAGGTCTGATAAAAATAGAGGTAAATCCGATAACGTTCCAAGTGAAGAAGTGGTCAAAAAGATGAAAAACTATTGGAGACAACTTCTGAACGCCAAGCTGATCACTCAAAGGAAGTTTGATAATCTGACCAAAGCTGAAAGAGGAGGTTTGAGTGAACTTGATAAAGCTGGTTTTATCAAACGCCAATTGGTTGAAACTCGCCAAATCACTAAGCATGTGGCACAAATTTTGGATAGTCGCATGAATACTAAATACGATGAAAATGATAAACTTATTAGAGAGGTTAAAGTGATTACCCTGAAATCTAAACTGGTTTCTGACTTCAGAAAAGATTTCCAATTCTATAAAGTGAGAGAGATTAACAATTACCATCATGCCCATGATGCCTATCTGAATGCCGTCGTTGGAACTGCTTTGATTAAGAAATATCCAAAACTTGAAAGCGAGTTTGTCTATGGTGATTATAAAGTTTATGATGTTAGGAAAATGATTGCTAAGTCTGAGCAAGAAATAGGCAAAGCAACCGCAAAGTATTTCTTTTACTCTAATATCATGAACTTCTTCAAAACAGAAATTACACTTGCAAATGGAGAGATTCGCAAACGCCCTCTGATCGAAACTAATGGGGAAACTGGAGAAATTGTCTGGGATAAAGGGAGAGATTTTGCCACAGTGCGCAAAGTGTTGTCCATGCCCCAAGTCAATATCGTCAAGAAAACAGAAGTGCAGACAGGCGGATTCTCTAAGGAGTCAATTCTGCCAAAAAGAAATTCCGACAAGCTGATTGCTAGGAAAAAAGACTGGGACCCAAAAAAATATGGTGGTTTTGATAGTCCAACCGTGGCTTATTCAGTCCTGGTGGTTGCTAAGGTGGAAAAAGGGAAATCCAAGAAGCTGAAATCCGTTAAAGAGCTGCTGGGGATCACAATTATGGAAAGAAGTTCCTTTGAAAAAAATCCCATTGACTTTCTGGAAGCTAAAGGATATAAGGAAGTTAAAAAAGACCTGATCATTAAACTGCCTAAATATAGTCTTTTTGAGCTGGAAAACGGTAGGAAACGGATGCTGGCTAGTGCCGGAGAACTGCAAAAAGGAAATGAGCTGGCTCTGCCAAGCAAATATGTGAATTTTCTGTATCTGGCTAGTCATTATGAAAAGTTGAAGGGTAGTCCAGAAGATAACGAACAAAAACAATTGTTTGTGGAGCAGCATAAGCATTATCTGGATGAGATTATTGAGCAAATCAGTGAATTTTCTAAGAGAGTTATTCTGGCAGATGCCAATCTGGATAAAGTTCTTAGTGCATATAACAAACATAGAGACAAACCAATAAGAGAACAAGCAGAAAATATCATTCATCTGTTTACCTTGACCAATCTTGGAGCACCCGCTGCTTTTAAATACTTTGATACAACAATTGATAGGAAAAGATATACCTCTACAAAAGAAGTTCTGGATGCCACTCTTATCCATCAATCCATCACTGGTCTTTATGAAACACGCATTGATTTGAGTCAGCTGGGAGGTGACCCCAAGAAAAAACGCAAGGTGGAAGATCCTAAGAAAAAGCGGAAAGTGGACACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAAACGGCCGGCCGCGGTCATAGCTGTTTCCTGAACAGATCCCGGGTGGCATCCCTGTGACCCCTCCCCAGTGCCTCTCCTGGCCCTGGAAGTTGCCACTCCAGTGCCCACCAGCCTTGTCCTAATAAAATTAAGTTGCATCATTTTGTCTGACTAGGTGTCCTTCTATAATATTATGGGGTGGAGGGGGGTGGTATGGAGCAAGGGGCAAGTTGGGAAGACAACCTGTAGGGCCTGCGGGGTCTATTGGGAACCAAGCTGGAGTGCAGTGGCACAATCTTGGCTCACTGCAATCTCCGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTTGTTGGGATTCCAGGCATGCATGACCAGGCTCAGCTAATTTTTGTTTTTTTGGTAGAGGCGGGGTTTCACCATATTGGCCAGGCTGGTCTCCAACTCCTAATCTCAGGTGATCTACCCACCTTGGCCTCCCAAATTGCTGGGATTACAGGCGTGAACCACTGCTCCCTTCCCTGTCCTTCTGATTTTAAAATAACTATACCAGCAGGAGGACGTCCAGACACAGCATAGGCTACCTGGCCATGCCCAACCGGTGGGACATTTGAGTTGCTTGCTTGGCACTGTCCTCTCATGCGTTGGGTCCACTCAGTAGATGCCTGTTGAATTGGGTACGCGGCCAGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTCCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGACGCGTAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTGCGGCCGCAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGATGATATATTTTTATCTTGTGCAATGTAACATCAGAGATTTTGAGACACGGGCCAGAGCTGCCAGGAAACAGCTATGACCATGTAATACGACTCACTATAGGGGATATCAGCTGGATGGCAGTTAAC

Features:

|  |  |
| --- | --- |
| U6 | 75 - 331 |
|  |  |
| Scramble Seq | 339 - 358 |
|  |  |
| CMV | 463 - 1077 |
|  |  |
| Cas9-NLS-Myc-DDK | 1172 - 5422 |
|  |  |
| Ori | 6191 - 6810 |
|  |  |
| Amp | 6958 - 7818 |

*Note: BamH1 and BsmB1 are not present in this plasmid.*