pCas-Guide-Puro-CRISPRa gene activation vector, Catalog # GE100081, updated 07/27/2020

9350bp

CACCACGTGACGGAGCGTGACCGCGCGCCGAGCGCGCGCCAAGGTCGGGCAGGAAGAGGGCCTATTTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCTGTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGTACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTATGTTTTAAAATGGACTATCATATGCTTACCGTAACTTGAAAGTATTTCGATTTCTTGGGTTTATATATCTTGTGGAAAGGACGCGGGATCCACTGGACCAGGCAGCAGCGTCAGAAGACTTTTTTGGAACGTCTCGTTTTAGAGCTAGGCCAACATGAGGATCACCCATGTCTGCAGGGCCTAGCAAGTTAAAATAAGGCTAGTCCGTTATCAACTTGGCCAACATGAGGATCACCCATGTCTGCAGGGCCAAGTGGCACCGAGTCGGTGCTTTTTTTGGTGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGAACCGGTACCGAGGAGATCTGCCGCCGCGATCGCCATGGATAAGAAATACTCAATAGGACTGGCTATTGGCACAAATAGCGTCGGATGGGCTGTGATCACTGATGAATATAAGGTTCCTTCTAAAAAGTTCAAGGTTCTGGGAAATACAGACCGCCACAGTATCAAAAAAAATCTTATAGGGGCTCTTCTGTTTGACAGTGGAGAGACAGCCGAAGCTACTAGACTCAAACGGACAGCTAGGAGAAGGTATACAAGACGGAAGAATAGGATTTGTTATCTCCAGGAGATTTTTTCAAATGAGATGGCCAAAGTGGATGATAGTTTCTTTCATAGACTTGAAGAGTCTTTTTTGGTGGAAGAAGACAAGAAGCATGAAAGACATCCTATTTTTGGAAATATAGTGGATGAAGTTGCTTATCACGAGAAATATCCAACTATCTATCATCTGAGAAAAAAATTGGTGGATTCTACTGATAAAGCCGATTTGCGCCTGATCTATTTGGCCCTGGCCCACATGATTAAGTTTAGAGGTCATTTTTTGATTGAGGGCGATCTGAATCCTGATAATAGTGATGTGGACAAACTGTTTATCCAGTTGGTGCAAACCTACAATCAACTGTTTGAAGAAAACCCTATTAACGCAAGTGGAGTGGATGCTAAAGCCATTCTTTCTGCAAGATTGAGTAAATCAAGAAGACTGGAAAATCTCATTGCTCAGCTCCCCGGTGAGAAGAAAAATGGCCTGTTTGGGAATCTCATTGCTTTGTCATTGGGTTTGACCCCTAATTTTAAATCAAATTTTGATTTGGCAGAAGATGCTAAACTCCAGCTTTCAAAAGATACTTACGATGATGATCTGGATAATCTGTTGGCTCAAATTGGAGATCAATATGCTGATTTGTTTTTGGCAGCTAAGAATCTGTCAGATGCTATTCTGCTTTCAGACATCCTGAGAGTGAATACTGAAATAACTAAGGCTCCCCTGTCAGCTTCAATGATTAAACGCTACGATGAACATCATCAAGACTTGACTCTTCTGAAAGCCCTGGTTAGACAACAACTTCCAGAAAAGTATAAAGAAATCTTTTTTGATCAATCAAAAAACGGATATGCAGGTTATATTGATGGCGGCGCAAGCCAAGAAGAATTTTATAAATTTATCAAACCAATTCTGGAAAAAATGGATGGTACTGAGGAACTGTTGGTGAAACTGAATAGAGAAGATTTGCTGCGCAAGCAACGGACCTTTGACAACGGCTCTATTCCCCATCAAATTCACTTGGGTGAGCTGCATGCTATTTTGAGAAGACAAGAAGACTTTTATCCATTTCTGAAAGACAATAGAGAGAAGATTGAAAAAATCTTGACTTTTAGGATTCCTTATTATGTTGGTCCATTGGCCAGAGGCAATAGTAGGTTTGCATGGATGACTCGGAAGTCTGAAGAAACAATTACCCCATGGAATTTTGAAGAAGTTGTCGATAAAGGTGCTTCAGCTCAATCATTTATTGAACGCATGACAAACTTTGATAAAAATCTTCCAAATGAAAAAGTGCTGCCAAAACATAGTTTGCTTTATGAGTATTTTACCGTTTATAACGAATTGACAAAGGTCAAATATGTTACTGAAGGAATGAGAAAACCAGCATTTCTTTCAGGTGAACAGAAGAAAGCCATTGTTGATCTGCTCTTCAAAACAAATAGGAAAGTGACCGTTAAGCAACTGAAAGAAGATTATTTCAAAAAAATAGAATGTTTTGATAGTGTTGAAATTTCAGGAGTTGAAGATAGATTTAATGCTTCACTGGGTACATACCATGATTTGCTGAAAATTATTAAAGATAAAGATTTTTTGGATAATGAAGAAAATGAAGACATCCTGGAGGATATTGTTCTGACATTGACCCTGTTTGAAGATAGGGAGATGATTGAGGAAAGACTTAAAACATACGCTCACCTCTTTGATGATAAGGTGATGAAACAGCTTAAAAGACGCAGATATACTGGTTGGGGAAGGTTGTCCAGAAAATTGATTAATGGTATTAGGGATAAGCAATCTGGCAAAACAATACTGGATTTTTTGAAATCAGATGGTTTTGCCAATCGCAATTTTATGCAGCTCATCCATGATGATAGTTTGACATTTAAAGAAGACATCCAAAAAGCACAAGTGTCTGGACAAGGCGATAGTCTGCATGAACATATTGCAAATCTGGCTGGTAGCCCTGCTATTAAAAAAGGTATTCTCCAGACTGTGAAAGTTGTTGATGAATTGGTCAAAGTGATGGGGCGGCATAAGCCAGAAAATATCGTTATTGAAATGGCAAGAGAAAATCAGACAACTCAAAAGGGCCAGAAAAATTCCAGAGAGAGGATGAAAAGAATCGAAGAAGGTATCAAAGAACTGGGAAGTCAGATTCTTAAAGAGCATCCTGTTGAAAATACTCAATTGCAAAATGAAAAGCTCTATCTCTATTATCTCCAAAATGGAAGAGATATGTATGTGGACCAAGAACTGGATATTAATAGGCTGAGTGATTATGATGTCGATGCCATTGTTCCACAAAGTTTCCTTAAAGACGATTCAATAGACAATAAGGTCCTGACCAGGTCTGATAAAAATAGAGGTAAATCCGATAACGTTCCAAGTGAAGAAGTGGTCAAAAAGATGAAAAACTATTGGAGACAACTTCTGAACGCCAAGCTGATCACTCAAAGGAAGTTTGATAATCTGACCAAAGCTGAAAGAGGAGGTTTGAGTGAACTTGATAAAGCTGGTTTTATCAAACGCCAATTGGTTGAAACTCGCCAAATCACTAAGCATGTGGCACAAATTTTGGATAGTCGCATGAATACTAAATACGATGAAAATGATAAACTTATTAGAGAGGTTAAAGTGATTACCCTGAAATCTAAACTGGTTTCTGACTTCAGAAAAGATTTCCAATTCTATAAAGTGAGAGAGATTAACAATTACCATCATGCCCATGATGCCTATCTGAATGCCGTCGTTGGAACTGCTTTGATTAAGAAATATCCAAAACTTGAAAGCGAGTTTGTCTATGGTGATTATAAAGTTTATGATGTTAGGAAAATGATTGCTAAGTCTGAGCAAGAAATAGGCAAAGCAACCGCAAAGTATTTCTTTTACTCTAATATCATGAACTTCTTCAAAACAGAAATTACACTTGCAAATGGAGAGATTCGCAAACGCCCTCTGATCGAAACTAATGGGGAAACTGGAGAAATTGTCTGGGATAAAGGGAGAGATTTTGCCACAGTGCGCAAAGTGTTGTCCATGCCCCAAGTCAATATCGTCAAGAAAACAGAAGTGCAGACAGGCGGATTCTCTAAGGAGTCAATTCTGCCAAAAAGAAATTCCGACAAGCTGATTGCTAGGAAAAAAGACTGGGACCCAAAAAAATATGGTGGTTTTGATAGTCCAACCGTGGCTTATTCAGTCCTGGTGGTTGCTAAGGTGGAAAAAGGGAAATCCAAGAAGCTGAAATCCGTTAAAGAGCTGCTGGGGATCACAATTATGGAAAGAAGTTCCTTTGAAAAAAATCCCATTGACTTTCTGGAAGCTAAAGGATATAAGGAAGTTAAAAAAGACCTGATCATTAAACTGCCTAAATATAGTCTTTTTGAGCTGGAAAACGGTAGGAAACGGATGCTGGCTAGTGCCGGAGAACTGCAAAAAGGAAATGAGCTGGCTCTGCCAAGCAAATATGTGAATTTTCTGTATCTGGCTAGTCATTATGAAAAGTTGAAGGGTAGTCCAGAAGATAACGAACAAAAACAATTGTTTGTGGAGCAGCATAAGCATTATCTGGATGAGATTATTGAGCAAATCAGTGAATTTTCTAAGAGAGTTATTCTGGCAGATGCCAATCTGGATAAAGTTCTTAGTGCATATAACAAACATAGAGACAAACCAATAAGAGAACAAGCAGAAAATATCATTCATCTGTTTACCTTGACCAATCTTGGAGCACCCGCTGCTTTTAAATACTTTGATACAACAATTGATAGGAAAAGATATACCTCTACAAAAGAAGTTCTGGATGCCACTCTTATCCATCAATCCATCACTGGTCTTTATGAAACACGCATTGATTTGAGTCAGCTGGGAGGTGACCCCAAGAAAAAACGCAAGGTGGAAGATCCTAAGAAAAAGCGGAAAGTGGACGACGCATTGGACGATTTTGATCTGGATATGCTGGGAAGTGACGCCCTCGATGATTTTGACCTTGACATGCTTGGTTCGGATGCCCTTGATGACTTTGACCTCGACATGCTCGGCAGTGACGCCCTTGATGATTTCGACCTGGACATGCTGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAAACGGCCGGCCGCGGTCATAGCTGTTTCCTGAACAGATCCCGGGTGGCATCCCTGTGACCCCTCCCCAGTGCCTCTCCTGGCCCTGGAAGTTGCCACTCCAGTGCCCACCAGCCTTGTCCTAATAAAATTAAGTTGCATCATTTTGTCTGACTAGGTGTCCTTCTATAATATTATGGGGTGGAGGGGGGTGGTATGGAGCAAGGGGCAAGTTGGGAAGACAACCTGTAGGGCCTGCGGGGTCTATTGGGAACCAAGCTGGAGTGCAGTGGCACAATCTTGGCTCACTGCAATCTCCGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTTGTTGGGATTCCAGGCATGCATGACCAGGCTCAGCTAATTTTTGTTTTTTTGGTAGAGGCGGGGTTTCACCATATTGGCCAGGCTGGTCTCCAACTCCTAATCTCAGGTGATCTACCCACCTTGGCCTCCCAAATTGCTGGGATTACAGGCGTGAACCACTGCTCCCTTCCCTGTCCTTCTGATTTTAAAATAACTATACCAGCAGGAGGACGTCCAGACACAGCATAGGCTACCTGGCCATGCCCAACCGGTGGGACATTTGAGTTGCTTGCTTGGCACTGTCCTCTCATGCGTTGGGTCCACTCAGTAGATGCCTGTTGAATTGGGTACGCGGCCAGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTCCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGACGCGTAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTGCGGCCGCAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGATGATATATTTTTATCTTGTGCAATGTAACATCAGAGATTTTGAGACACGGGCCAGAGCTGCCAGGAAACAGCTATGACCATGTAATACGACTCACTATAGGGGATATCAGCTGGATGGCAGTTAACACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGTCTAGAGAACAAACGACCCAACACCGTGCGTTTTATTCTGTCTTTTTATTGCCGGGCCGGCCGTTTGGGTCAGGCACCGGGCTTGCGGGTCATGCACCAGGTACGCGGTCCTTCGGGCACCTCGACGTCGGCGGTGACGGTGAAGCCGAGCCGCTCGTAGAAGGGGAGGTTGCGGGGCGCGGAGGTCTCCAGGAAGGCGGGCACCCCGGCGCGCTCGGCCGCCTCCACTCCGGGGAGCACGACGGCGCTGCCCAGACCCTTGCCCTGGTGGTCGGGCGATACGCCGACGGTGGCCAGGAACCACGCGGGCTCCTTGGGCCGGTGCGGCGCCAGGAGGCCTTCCATCTGTTGCTGCGCGGCCAGCCGGGAACCGCTCAACTCGGCCATGCGCGGGCCGATCTCGGCGAACACCGCCCCCGCTTCGACGCTCTCCGGCGTGGTCCAGACCGCCACCGCGGCGCCGTCGTCCGCGACCCACACCTTGCCGATGTCGAGCCCGACGCGCGTGAGGAAGAGTTCTTGCAGCTCGGTGACCCGCTCGATGTGGCGGTCCGGATCGACGGTGTGGCGCGTGGCGGGGTAGTCGGCGAACGCGGCGGCGAGGGTGCGTACGGCCCTGGGGACGTCGTCGCGGGTGGCGAGGCGCACCGTGGGCTTGTACTCGGTCATGGCGGCAGTTAGGAAGCGGATTTGCAAAAGCCTAGGCCTCCAAAAAAGCCTCCTCACTACTTCTGGAATAGCTCAGAGGCCGAGGCGGCCTCGGCCTCTGCATAAATAAAAAAAATTAGTCAGCCATGGGGCGGAGAATGGGCGGAACTGGGCGGAGTTAGGGGCGGGATGGGCGGAGTTAGGGGCGGGACTATGGTTGCTGACTAATTGAGATGCATGCTTTGCATACTTCTGCCTGCTGGGGAGCCTGGGGACTTTCCACACCTGGTTGCTGACTAATTGAGATGCATGCTTTGCATACTTCTGCCTGCTGGGGAGCCTGGGGACTTTCCACACCCTAACTGACACACATTCCACAGCTGGTTCTTTCCGCCTCAG

56-296 U6 Promoter

300-306 BamH1

344-350 BsmB1

351-485 gRNA-MS2 scaffold

537-1120 CMV promoter

1223-5617 Cas9-NLS-VP64-Myc-Flag

6407-6995 pBR322 origin

7159-8019 Amp

8373-8972 Puromycin Resistance Gene

8993-9350 SV40 promoter