

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

pLVX-EF1alpha-SARS-CoV-2-nsp5-C145A-2xStrep-IRES-Puro

RRID:Addgene_141371

Type: Plasmid

Proper Citation

RRID:Addgene_141371

Plasmid Information

URL: <http://www.addgene.org/141371>

Proper Citation: RRID:Addgene_141371

Insert Name: SARS-CoV-2-nsp5-C145A

Organism: SARS-CoV-2

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:32353859](#)

Vector Backbone Description: Backbone Marker:Takara Bio; Backbone Size:8825; Vector Backbone:pLVX-EF1alpha-IRES-Puro; Vector Types:Mammalian Expression, Lentiviral; Bacterial Resistance:Ampicillin

Comments: Please visit <https://www.biorxiv.org/content/10.1101/2020.03.22.002386v3> for bioRxiv preprint.

Plasmid Name: pLVX-EF1alpha-SARS-CoV-2-nsp5-C145A-2xStrep-IRES-Puro

Relevant Mutation: C145A, human codon optimized

Record Creation Time: 20220422T221815+0000

Record Last Update: 20260815T080648+0000

Ratings and Alerts

No rating or validation information has been found for pLVX-EF1alpha-SARS-CoV-2-nsp5-C145A-2xStrep-IRES-Puro.

No alerts have been found for pLVX-EF1alpha-SARS-CoV-2-nsp5-C145A-2xStrep-IRES-Puro.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 10 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#).

Biswas KH, et al. (2026) E50A Mutation Increases the Bioluminescence Activity of picALuc. Biosensors, 16(3).

D'Oliviera A, et al. (2025) Recognition and cleavage of human tRNA methyltransferase TRMT1 by the SARS-CoV-2 main protease. eLife, 12.

Broderick K, et al. (2025) Human protein interaction networks of ancestral and variant SARS-CoV-2 in organ-specific cells and bodily fluids. Nature communications, 16(1), 5784.

Wu X, et al. (2023) Secreted ORF8 induces monocytic pro-inflammatory cytokines through NLRP3 pathways in patients with severe COVID-19. iScience, 26(6), 106929.

Lee MJ, et al. (2022) SARS-CoV-2 escapes direct NK cell killing through Nsp1-mediated downregulation of ligands for NKG2D. Cell reports, 41(13), 111892.

Bram Y, et al. (2022) Dual-Reporter System for Real-Time Monitoring of SARS-CoV-2 Main Protease Activity in Live Cells Enables Identification of an Allosteric Inhibition Path. ACS bio & med chem Au, 2(6), 627.

Geethakumari AM, et al. (2022) A genetically encoded BRET-based SARS-CoV-2 Mpro protease activity sensor. Communications chemistry, 5(1), 117.

Rawson JMO, et al. (2021) Development of a Cell-Based Luciferase Complementation Assay for Identification of SARS-CoV-2 3CLpro Inhibitors. Viruses, 13(2).

Rauti R, et al. (2021) Effect of SARS-CoV-2 proteins on vascular permeability. eLife, 10.

Vazquez C, et al. (2021) SARS-CoV-2 viral proteins NSP1 and NSP13 inhibit interferon activation through distinct mechanisms. PloS one, 16(6), e0253089.