

Resource Summary Report

Generated by [dkNET](#) on Aug 19, 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 [dkNET](#) .

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

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.

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

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.