

Resource Summary Report

Generated by [dkNET](#) on Aug 20, 2026

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

RRID:Addgene_141370

Type: Plasmid

Proper Citation

RRID:Addgene_141370

Plasmid Information

URL: <http://www.addgene.org/141370>

Proper Citation: RRID:Addgene_141370

Insert Name: SARS-CoV-2-nsp5

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-nsp5-2xStrep-IRES-Puro

Relevant Mutation: 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-nsp5-2xStrep-IRES-Puro.

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

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 13 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).

Goodson BA, et al. (2026) SARS-CoV-2 ORF3a blocks lysosomal cholesterol egress by disrupting VPS39-regulated NPC2 trafficking and BMP metabolism. Cell reports, 45(6), 117544.

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.

Hartmann JA, et al. (2024) Evasion of NKG2D-mediated cytotoxic immunity by sarbecoviruses. Cell, 187(10), 2393.

Laprise F, et al. (2024) SARS-CoV-2 Accessory Protein ORF8 Targets the Dimeric IgA Receptor pIgR. Viruses, 16(7).

Lear TB, et al. (2023) E3 ubiquitin ligase ZBTB25 suppresses beta coronavirus infection through ubiquitination of the main viral protease MPro. The Journal of biological chemistry, 299(12), 105388.

Lee JD, et al. (2023) Differences in syncytia formation by SARS-CoV-2 variants modify host chromatin accessibility and cellular senescence via TP53. Cell reports, 42(12), 113478.

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.

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

Sansico F, et al. (2021) COVID-19 Specific Immune Markers Revealed by Single Cell Phenotypic Profiling. Biomedicines, 9(12).

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