

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

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

RRID:Addgene_141385

Type: Plasmid

Proper Citation

RRID:Addgene_141385

Plasmid Information

URL: <http://www.addgene.org/141385>

Proper Citation: RRID:Addgene_141385

Insert Name: SARS-CoV-2-E

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-E-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-E-2xStrep-IRES-Puro.

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

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Xiang Q, et al. (2026) Ubiquitin ligase ITCH regulates life cycle of SARS-CoV-2 virus. eLife, 14.

Zhao H, et al. (2025) Evolution of a fuzzy ribonucleoprotein complex in viral assembly. bioRxiv : the preprint server for biology.

Hinkle JJ, et al. (2025) Subcellular localization of SARS-CoV-2 E and 3a proteins along the secretory pathway. Journal of molecular histology, 56(2), 98.

Zhao H, et al. (2025) Evolution of a fuzzy ribonucleoprotein complex in viral assembly. eLife, 14.

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.

Xiang Q, et al. (2024) Ubiquitin Ligase ITCH Regulates Life Cycle of SARS-CoV-2 Virus. bioRxiv : the preprint server for biology.

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

Braun A, et al. (2024) Mapping the immunopeptidome of seven SARS-CoV-2 antigens across common HLA haplotypes. Nature communications, 15(1), 7547.

Wang WA, et al. (2023) SARS-CoV-2 infection alkalinizes the ERGIC and lysosomes through the viroporin activity of the viral envelope protein. Journal of cell science, 136(6).

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.

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.

Lawanprasert A, et al. (2022) Inhalable SARS-CoV-2 Mimetic Particles Induce Pleiotropic Antigen Presentation. Biomacromolecules, 23(3), 1158.

Oktelik FB, et al. (2022) Decline of humoral immune responses after natural SARS-CoV-2 infection can be efficiently reversed by vaccination. Canadian journal of microbiology, 68(8), 543.

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.

Pringle ES, et al. (2022) Thiopurines inhibit coronavirus Spike protein processing and incorporation into progeny virions. *PLoS pathogens*, 18(9), e1010832.

Gupta RK, et al. (2022) Cyclin D3 restricts SARS-CoV-2 envelope incorporation into virions and interferes with viral spread. *The EMBO journal*, 41(22), e111653.

Wang Q, et al. (2022) Functional properties of the spike glycoprotein of the emerging SARS-CoV-2 variant B.1.1.529. *Cell reports*, 39(11), 110924.

Singh P, et al. (2022) Dynamic Ca^{2+} sensitivity stimulates the evolved SARS-CoV-2 spike strain-mediated membrane fusion for enhanced entry. *Cell reports*, 39(3), 110694.

Yu HG, et al. (2021) Detecting SARS-CoV-2 Orf3a and E ion channel activity in COVID-19 blood samples. *Journal of clinical and translational science*, 5(1), e196.

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