Resource Summary Report

Generated by dkNET on Aug 19, 2026

pLVX-EF1alpha-SARS-CoV-2-orf3a-2xStrep-IRES-Puro

RRID:Addgene_141383
Type: Plasmid

Proper Citation

RRID:Addgene_141383

Plasmid Information

URL: http://www.addgene.org/141383

Proper Citation: RRID:Addgene_141383

Insert Name: SARS-CoV-2-orf3a

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-orf3a-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-orf3a-2xStrep-IRES-Puro.

No alerts have been found for pLVX-EF1alpha-SARS-CoV-2-orf3a-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 .

Mysorekar I, et al. (2025) ORF3a is a key driver of maternal SARS-CoV-2 infection-associated placental dysfunction. Research square.

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.

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.

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

Zhu H, et al. (2023) SARS-CoV-2 ORF3a expression in brain disrupts the autophagy-lysosomal pathway, impairs sphingolipid homeostasis, and drives neuropathogenesis. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 37(5), e22919.

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.

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.

Hall R, et al. (2022) SARS-CoV-2 ORF6 disrupts innate immune signalling by inhibiting cellular mRNA export. PLoS pathogens, 18(8), e1010349.

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.

Aguilar-Lemarroy A, et al. (2021) Severe acute respiratory syndrome coronavirus 2 ORF3a induces the expression of ACE2 in oral and pulmonary epithelial cells and the food supplement Vita Deyun® diminishes this effect. Experimental and therapeutic medicine, 21(5), 485.

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

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.