

Resource Summary Report

Generated by [RRID](#) on Aug 21, 2026

pcDNA3.3_CoV2_501V2

RRID:Addgene_170449

Type: Plasmid

Proper Citation

RRID:Addgene_170449

Plasmid Information

URL: <http://www.addgene.org/170449>

Proper Citation: RRID:Addgene_170449

Insert Name: SARS-CoV-2 501V2 spike D18

Organism: SARS-CoV-2, 501V2 (B.1.351)

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:34016740](https://pubmed.ncbi.nlm.nih.gov/34016740/)

Vector Backbone Description: Backbone Size:5500; Vector Backbone:pcDNA3.3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Please visit <https://www.biorxiv.org/content/10.1101/2021.02.16.430500v1> for bioRxiv preprint.

Plasmid Name: pcDNA3.3_CoV2_501V2

Relevant Mutation: L18F, D80A, D215G, R246I, K417N, E484K, N501Y, D614G, A701V; 18aa deletion in c-terminal tail

Record Creation Time: 20220422T221952+0000

Record Last Update: 20260815T081008+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3.3_CoV2_501V2.

No alerts have been found for pcDNA3.3_CoV2_501V2.

Data and Source Information

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Zúñiga R, et al. (2025) Bromhexine inhibits SARS-CoV-2 Omicron and variant pseudovirus infection via ACE2-targeted mechanisms. *Frontiers in pharmacology*, 16, 1745277.

Milewska A, et al. (2025) Evolution of the SARS-CoV-2 spike protein in utilizing host transmembrane serine proteases. *iScience*, 28(9), 113318.

Shukla N, et al. (2024) Pseudotyped virus infection of multiplexed ACE2 libraries reveals SARS-CoV-2 variant shifts in receptor usage. *bioRxiv : the preprint server for biology*.

Thümmel L, et al. (2024) Fluoxetine and Sertraline Potently Neutralize the Replication of Distinct SARS-CoV-2 Variants. *Viruses*, 16(4).

Eden T, et al. (2024) Generation of nanobodies from transgenic 'LamaMice' lacking an endogenous immunoglobulin repertoire. *Nature communications*, 15(1), 4728.

Shukla N, et al. (2024) Pseudotyped virus infection of multiplexed ACE2 libraries reveals SARS-CoV-2 variant shifts in receptor usage. *PLoS pathogens*, 20(5), e1012044.

Dacon C, et al. (2023) Rare, convergent antibodies targeting the stem helix broadly neutralize diverse betacoronaviruses. *Cell host & microbe*, 31(1), 97.

Ahmed N, et al. (2023) microRNA-185 Inhibits SARS-CoV-2 Infection through the Modulation of the Host's Lipid Microenvironment. *Viruses*, 15(9).

Song J, et al. (2022) LRRC15 inhibits SARS-CoV-2 cellular entry in trans. *PLoS biology*, 20(10), e3001805.

Shah M, et al. (2022) SARS-CoV-2 pan-variant inhibitory peptides deter S1-ACE2 interaction and neutralize delta and omicron pseudoviruses. *Computational and structural biotechnology journal*, 20, 2042.

Kuzikov M, et al. (2022) High-throughput drug screening allowed identification of entry inhibitors specifically targeting different routes of SARS-CoV-2 Delta and Omicron/BA.1. *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie*, 151, 113104.

Chiu CH, et al. (2022) Humoral, Cellular and Cytokine Immune Responses Against SARS-CoV-2 Variants in COVID-19 Convalescent and Confirmed Patients With Different Disease Severities. *Frontiers in cellular and infection microbiology*, 12, 862656.

Song J, et al. (2021) LRRC15 is an inhibitory receptor blocking SARS-CoV-2 spike-mediated entry in trans. *bioRxiv : the preprint server for biology*.