

Resource Summary Report

Generated by [RRID](#) on Aug 27, 2026

pcDNA3.1-SARS2-Spike

RRID:Addgene_145032

Type: Plasmid

Proper Citation

RRID:Addgene_145032

Plasmid Information

URL: <http://www.addgene.org/145032>

Proper Citation: RRID:Addgene_145032

Insert Name: SARS-CoV-2 Spike

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:32225175](#)

Vector Backbone Description: Backbone Size:5500; Vector Backbone:pcDNA3.1; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: See further use in: Cell entry mechanisms of SARS-CoV-2. Jian Shang, Yushun Wan, Chuming Luo, Gang Ye, Qibin Geng, Ashley Auerbach, and Fang Li. PNAS May 26, 2020 117 (21) 11727-11734 DOI: 10.1073/pnas.2003138117

Plasmid Name: pcDNA3.1-SARS2-Spike

Record Creation Time: 20220422T221818+0000

Record Last Update: 20260815T080653+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3.1-SARS2-Spike.

No alerts have been found for pcDNA3.1-SARS2-Spike.

Data and Source Information

Usage and Citation Metrics

We found 71 mentions in open access literature.

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

Ito T, et al. (2025) Engineered ACE2 decoy in dry powder form for inhalation: A novel therapy for SARS-CoV-2 variants. *Molecular therapy. Methods & clinical development*, 33(2), 101459.

Wang S, et al. (2025) Characterization of private mutations in the spike protein of SARS-CoV-2 correlates with viral prevalence. *BMC infectious diseases*, 25(1), 996.

Nurisyah S, et al. (2025) Evaluation of an E. coli-expressed spike protein-based in-house ELISA system for assessment of antibody responses after COVID-19 infection and vaccination. *Narra J*, 5(1), e1250.

Kumara D, et al. (2025) Inhibitory Effects of Citrus-Derived Flavonoids Hesperidin and Hesperetin on SARS-CoV-2 Spike-Mediated Syncytia Formation Using In Vitro Cell Model. *Advanced pharmaceutical bulletin*, 15(2), 416.

Ye L, et al. (2024) Modulation of alveolar macrophage and mitochondrial fitness by medicinal plant-derived nanovesicles to mitigate acute lung injury and viral pneumonia. *Journal of nanobiotechnology*, 22(1), 190.

Lidenge SJ, et al. (2024) Viral Epitope Scanning Reveals Correlation between Seasonal HCoVs and SARS-CoV-2 Antibody Responses among Cancer and Non-Cancer Patients. *Viruses*, 16(3).

Gomez-Zepeda D, et al. (2024) Thunder-DDA-PASEF enables high-coverage immunopectidomics and is boosted by MS2Rescore with MS2PIP timsTOF fragmentation prediction model. *Nature communications*, 15(1), 2288.

Zhang S, et al. (2024) Transfected SARS-CoV-2 spike DNA for mammalian cell expression inhibits p53 activation of p21(WAF1), TRAIL Death Receptor DR5 and MDM2 proteins in cancer cells and increases cancer cell viability after chemotherapy exposure. *Oncotarget*, 15, 275.

Cui L, et al. (2024) Enhancing Immune Responses against SARS-CoV-2 Variants in Aged Mice with INDUK: A Chimeric DNA Vaccine Encoding the Spike S1-TM Subunits. *ACS omega*, 9(32), 34624.

Khan S, et al. (2024) High-throughput screening identifies broad-spectrum Coronavirus entry inhibitors. *iScience*, 27(6), 110019.

Takeishi A, et al. (2024) Genetic engineering employing MPB70 and its promoter enables efficient secretion and expression of foreign antigen in bacillus Calmette Gu??rin (BCG) Tokyo. *Microbiology and immunology*.

Colom MS, et al. (2024) Complete combinatorial mutational enumeration of a protein functional site enables sequence-landscape mapping and identifies highly-mutated variants that retain activity. *Protein science : a publication of the Protein Society*, 33(8), e5109.

Lin CH, et al. (2024) Inhibitory Efficacy of Main Components of *Scutellaria baicalensis* on the Interaction between Spike Protein of SARS-CoV-2 and Human Angiotensin-Converting Enzyme II. *International journal of molecular sciences*, 25(5).

Unali G, et al. (2023) Interferon-inducible phospholipids govern IFITM3-dependent endosomal antiviral immunity. *The EMBO journal*, 42(10), e112234.

Cui Q, et al. (2023) The Apolipoprotein E neutralizing antibody inhibits SARS-CoV-2 infection by blocking cellular entry of lipoviral particles. *MedComm*, 4(5), e400.

Gunaratne GS, et al. (2023) Convergent activation of two-pore channels mediated by the NAADP-binding proteins JPT2 and LSM12. *Science signaling*, 16(799), eadg0485.

Renzi F, et al. (2023) Engineering an ACE2-Derived Fragment as a Decoy for Novel SARS-CoV-2 Virus. *ACS pharmacology & translational science*, 6(6), 857.

Onnis A, et al. (2023) SARS-CoV-2 Spike protein suppresses CTL-mediated killing by inhibiting immune synapse assembly. *The Journal of experimental medicine*, 220(2).

Miluzio A, et al. (2023) Mapping of functional SARS-CoV-2 receptors in human lungs establishes differences in variant binding and SLC1A5 as a viral entry modulator of hACE2. *EBioMedicine*, 87, 104390.

Alcantara MC, et al. (2023) Deep Mutational Scanning to Predict Escape from Bebtelovimab in SARS-CoV-2 Omicron Subvariants. *Vaccines*, 11(3).