# Resource Summary Report

Generated by dkNET on Sep 1, 2026

## HDM-SARS2-Spike-delta21

RRID:Addgene_155130
Type: Plasmid

### Proper Citation

RRID:Addgene_155130

### Plasmid Information

**URL:** http://www.addgene.org/155130

**Proper Citation:** RRID:Addgene_155130

**Insert Name:** SARS-CoV-2 Spike-delta21

**Organism:** Severe acute respiratory syndrome coronavirus 2

**Bacterial Resistance:** Ampicillin

**Defining Citation:** PMID:32384820

**Vector Backbone Description:** Backbone Size:4750; Vector Backbone:HDM; Vector Types:Mammalian Expression, Lentiviral; Bacterial Resistance:Ampicillin

**Comments:** Based on a plasmid described previously in Crawford et al. 2020, Protocol and Reagents for Pseudotyping Lentiviral Particles with SARS-CoV-2 Spike Protein for Neutralization Assays (https://www.mdpi.com/1999-4915/12/5/513). This is a version of the Spike expression plasmid used to pseudotype lentivirus which provided better titers in this protocol.

**Plasmid Name:** HDM-SARS2-Spike-delta21

**Relevant Mutation:** Codon optimized to H. sapiens using IDT codon optimization tool; deleted 21 amino acids by deletion from 3769-3831

**Record Creation Time:** 20220422T221850+0000

**Record Last Update:** 20260829T075750+0000

### Ratings and Alerts

No rating or validation information has been found for HDM-SARS2-Spike-delta21.

No alerts have been found for HDM-SARS2-Spike-delta21.

## Data and Source Information

**Source:** Addgene

## Usage and Citation Metrics

We found 20 mentions in open access literature.

**Listed below are recent publications.** The full list is available at dkNET .


Erendor F, et al. (2026) An Ad5-Based COVID-19 Vaccine Encoding SARS-CoV-2 Spike Glycoprotein Induces Measurable Antibody and Cytokine Responses in Mice. Biotechnology journal, 21(3), e70216.

Wang J, et al. (2026) Redirection of SARS-CoV-2 to phagocytes by intranasal sACE2-Fc as a universal decoy confers complete prophylactic protection. eLife, 14.

Pivniouk V, et al. (2025) IL-13 protects epithelial cells from SARS-CoV-2 infection by inhibiting ACE2-mediated virus binding and cell entry. ImmunoHorizons, 9(12).

Gonzales J, et al. (2025) Development of an ultrahigh affinity, trimeric ACE2 biologic as a universal SARS-CoV-2 antagonist. Communications biology, 8(1), 1428.

Sahin F, et al. (2025) Membrane-targeted immunogenic compositions using exosome mimetic approach for vaccine development against SARS-CoV-2 and other pathogens. Scientific reports, 15(1), 10899.

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

Xu D, et al. (2024) Vaccine design via antigen reorientation. Nature chemical biology, 20(8), 1012.

Weidenbacher PA, et al. (2023) A ferritin-based COVID-19 nanoparticle vaccine that elicits robust, durable, broad-spectrum neutralizing antisera in non-human primates. Nature communications, 14(1), 2149.

Weidenbacher PA, et al. (2023) Decreased efficacy of a COVID-19 vaccine due to mutations present in early SARS-CoV-2 variants of concern. bioRxiv : the preprint server for biology.

Sun X, et al. (2022) Nanobody-Functionalized Cellulose for Capturing SARS-CoV-2. Applied and environmental microbiology, 88(5), e0230321.

Weidenbacher PA, et al. (2022) Converting non-neutralizing SARS-CoV-2 antibodies into broad-spectrum inhibitors. Nature chemical biology, 18(11), 1270.

Fiskin E, et al. (2022) Single-cell profiling of proteins and chromatin accessibility using PHAGE-ATAC. Nature biotechnology, 40(3), 374.

Pivniouk V, et al. (2022) The OM-85 bacterial lysate inhibits SARS-CoV-2 infection of epithelial cells by downregulating SARS-CoV-2 receptor expression. The Journal of allergy and clinical immunology, 149(3), 923.

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.

Gentles LE, et al. (2022) Dynamics of infection-elicited SARS-CoV-2 antibodies in children over time. medRxiv : the preprint server for health sciences.

Chen Y, et al. (2022) Immune recall improves antibody durability and breadth to SARS-CoV-2 variants. Science immunology, 7(78), eabp8328.

Nathan A, et al. (2021) Structure-guided T??cell vaccine design for SARS-CoV-2 variants and sarbecoviruses. Cell, 184(17), 4401.

Kelesidis T, et al. (2021) The ApoA-I mimetic peptide 4F attenuates in vitro replication of SARS-CoV-2, associated apoptosis, oxidative stress and inflammation in epithelial cells. Virulence, 12(1), 2214.

Crawford KHD, et al. (2021) Dynamics of Neutralizing Antibody Titers in the Months After Severe Acute Respiratory Syndrome Coronavirus 2 Infection. The Journal of infectious diseases, 223(2), 197.

Garrett ME, et al. (2021) High-resolution profiling of pathways of escape for SARS-CoV-2 spike-binding antibodies. Cell, 184(11), 2927.