

Resource Summary Report

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

pcDNA3-SARS-CoV-2-S-RBD-8his

RRID:Addgene_145145

Type: Plasmid

Proper Citation

RRID:Addgene_145145

Plasmid Information

URL: <http://www.addgene.org/145145>

Proper Citation: RRID:Addgene_145145

Insert Name: Secreted receptor binding domain (RBD; a.a. 333-529) of S protein from SARS-CoV-2

Organism: SARS coronavirus 2

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:32753553](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5332; Vector Backbone:pcDNA3.1(+); Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Please visit <https://www.biorxiv.org/content/10.1101/2020.03.16.994236v1> for BioRxiv preprint.

Plasmid Name: pcDNA3-SARS-CoV-2-S-RBD-8his

Relevant Mutation: Codon-optimized for human cell expression.

Record Creation Time: 20220422T221818+0000

Record Last Update: 20260815T080653+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3-SARS-CoV-2-S-RBD-8his.

No alerts have been found for pcDNA3-SARS-CoV-2-S-RBD-8his.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

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.

Cavazzini D, et al. (2024) Broad Neutralization Capacity of an Engineered Thermostable Three-Helix Angiotensin-Converting Enzyme 2 Polypeptide Targeting the Receptor-Binding Domain of SARS-CoV-2. *International journal of molecular sciences*, 25(22).

V??lzke JL, et al. (2023) Efficient Purification of Polyhistidine-Tagged Recombinant Proteins Using Functionalized Corundum Particles. *Biotech (Basel (Switzerland))*, 12(2).

Fertig TE, et al. (2022) Vaccine mRNA Can Be Detected in Blood at 15 Days Post-Vaccination. *Biomedicines*, 10(7).

Lupitha SS, et al. (2022) A rapid bead-based assay for screening of SARS-CoV-2 neutralizing antibodies. *Antibody therapeutics*, 5(2), 100.

Ventura C, et al. (2022) Maximization of the Minicircle DNA Vaccine Production Expressing SARS-CoV-2 RBD. *Biomedicines*, 10(5).

Zhang L, et al. (2022) An engineered ACE2 decoy receptor can be administered by inhalation and potently targets the BA.1 and BA.2 omicron variants of SARS-CoV-2. *bioRxiv : the preprint server for biology*.

Chen J, et al. (2022) Sustained Delivery of SARS-CoV-2 RBD Subunit Vaccine Using a High Affinity Injectable Hydrogel Scaffold. *Advanced healthcare materials*, 11(2), e2101714.

Chan KK, et al. (2021) An engineered decoy receptor for SARS-CoV-2 broadly binds protein S sequence variants. *Science advances*, 7(8).

Ahmad J, et al. (2021) Structures of synthetic nanobody-SARS-CoV-2-RBD complexes reveal distinct sites of interaction and recognition of variants. *Research square*.

Freeman KG, et al. (2021) A Mycobacteriophage-Based Vaccine Platform: SARS-CoV-2 Antigen Expression and Display. *Microorganisms*, 9(12).

Havranek B, et al. (2021) Computationally Designed ACE2 Decoy Receptor Binds SARS-CoV-2 Spike (S) Protein with Tight Nanomolar Affinity. *Journal of chemical information and modeling*, 61(9), 4656.

Ahmad J, et al. (2021) Structures of synthetic nanobody-SARS-CoV-2 receptor-binding domain complexes reveal distinct sites of interaction. *The Journal of biological chemistry*, 297(4), 101202.

McAndrews KM, et al. (2020) Heterogeneous antibodies against SARS-CoV-2 spike receptor binding domain and nucleocapsid with implications for COVID-19 immunity. *JCI insight*, 5(18).

Procko E, et al. (2020) The sequence of human ACE2 is suboptimal for binding the S spike protein of SARS coronavirus 2. *bioRxiv* : the preprint server for biology.