

COVID 19 Spike -1 RBD Coronavirus Recombinant Protein | COVID-19 recombinant protein

SARS-CoV-2 Spike-1 RBD

CATALOG # AAA79331	HOST Insect cells
------------------------------	-----------------------------

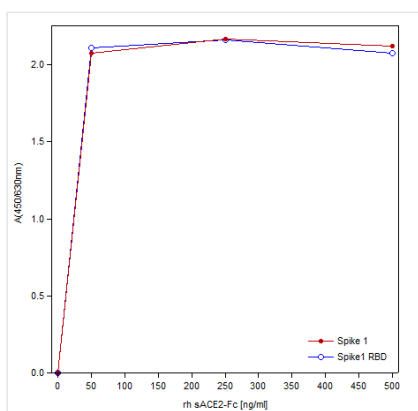
PRODUCT SYNONYMS

COVID 19 Spike -1 RBD Coronavirus; SARS-CoV-2 Spike-1 RBD; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike-1 RBD; COVID-19 recombinant protein

PRODUCT SPECIFICATIONS

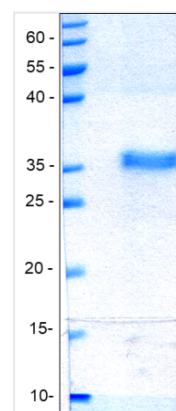
Host	Insect cells
Purity/Purification	> 98% by SDS-PAGE & Coomassie
Form/Format	lyophilized
Sequence	RVQPTDSIVR FPNITNLCPF GEVFNATRFA SVYAWNRKRI SNCVADYSVL YNSASFSTFK CYGVSP TKLN DLCFTNVYAD SFVIRGDEV R QIAPGQTGKI ADYNYKL PDD FTGCVIAWNS NNLDSKVGGN YNYLYRLFRK SNLKPFERDI STEIYQAGST PCNGVEGFNC YFPLQSYGFQ PTNGVG YQPY R VVLSFELL HAPATVCGPK KSTNLVKNKC VNFTRHHHHH H
Sequence Length	231
Tag Information	His-Tag

IMAGES



ELISA

Binding of sACE2-Fc to recombinant SARS-CoV2 Spike1 proteins in a functional ELISA. Recombinant SARS-CoV2 Spike1 and Spike1 RBD were coated with 1ug/ml in PBS. The sACE2-Fc [Cat# SFC-002] was added in increasing concentrations.



SDS-PAGE

SDS-PAGE analysis of recombinant SARS-Cov2 Spike1 RBD protein fragment derived from insect cells. Sample was loaded in 15% SDS-polyacrylamide gel under reducing conditions and stained with Coomassie stain.

ADDITIONAL INFORMATION

Related Product Information for COVID-19 recombinant protein

SARS-CoV2, which causes the global pandemic Corona virus disease 2019 (Covid-19), belongs to a family of viruses known as Corona viruses that are commonly comprised of four structural proteins: Spike protein (S), Envelope protein (E), Membrane protein (M), and Nucleocapsid protein (N). SARS-CoV2 Spike Protein (S Protein) is a glycoprotein that mediates membrane fusion and viral entry. The S protein is homotrimeric, with each ~180-kDa monomer consisting of two subunits, S1 and S2. In SARS-CoV2 proteolytic cleavage of the S protein into two distinct peptides, S1 and S2 subunits, is required for activation. The S1 subunit is focused on attachment of the protein to the host receptor while the S2 subunit is involved with cell fusion. Based on structural biology studies, the receptor binding domain (RBD), located in the C-terminal region of S1, can be oriented either in the up/standing or down/lying state. The standing state is associated with higher pathogenicity and both SARS-CoV-1 and MERS can access this state due to the flexibility in their respective RBDs. A similar two-state structure and flexibility is found in the SARS-CoV2 RBD. Based on amino acid (aa) sequence homology, the SARS-CoV2 S1 subunit RBD has 73% identity with the RBD of the SARS-CoV1 S1 RBD, but only 22% homology with the MERS S1 RBD. The low aa sequence homology is consistent with the finding that SARS and MERS bind different cellular receptors. The S Protein of the SARS-CoV2 virus, like the SARS-CoV1 counterpart, binds Angiotensin-Converting Enzyme 2 (ACE2), but with much higher affinity and faster binding kinetics.

NCBI AND UNIPROT INFORMATION

UniProt Accession #

[P0DTC2](#)

Molecular Weight

36 kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/covid-19-spike-1-rbd-coronavirus-recombinant-protein-insect-cells/79331>