

Recombinant COVID-19 S1 (HV69-70del) protein, His-tagged

Cat. No. Spike-381V Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant COVID-19 S1 (HV69-70del) protein(YP_009724390.1)(Val 16 - Arg 685), fused to His tag at the C-terminus, was expressed in HEK293.
Species	Sars-CoV-2
Source	HEK293
ProteinLength	Val 16 - Arg 685
Description	It's been reported that Coronavirus can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Molecular Mass	The protein has a calculated MW of 76.7 kDa. The protein migrates as 100-140 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per µg by the LAL method.

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Purity	>90% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20°C or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20°C to -70°C for 12 months in lyophilized state; -70°C for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.25 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

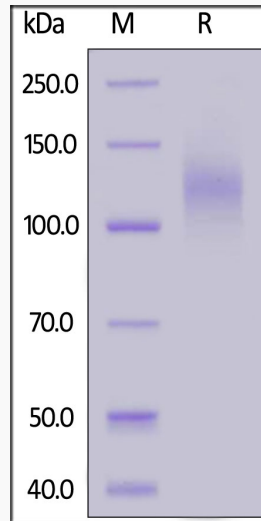
Gene Name	S surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	S
Synonyms	Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1; COVID-19
Gene ID	43740568
Protein Refseq	YP_009724390.1
UniProt ID	P0DTC2

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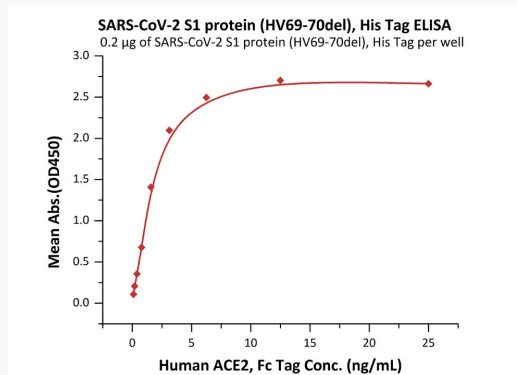
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SDS-PAGE



Bioactivity-ELISA



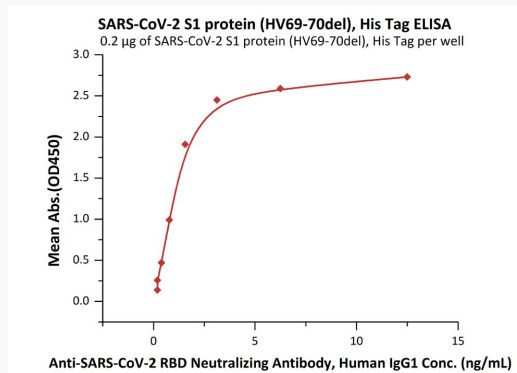
Immobilized SARS-CoV-2 S1 protein (HV69-70del), His Tag at 2 µg/mL (100 µL/well) can bind Human ACE2, Fc Tag with a linear range of 0.1-2 ng/mL.

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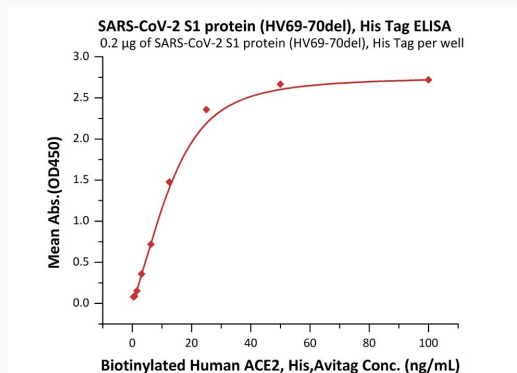
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Bioactivity-ELISA



Immobilized SARS-CoV-2 S1 protein (HV69-70del), His Tag at 2 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 RBD Neutralizing Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL.

Bioactivity-ELISA



Immobilized SARS-CoV-2 S1 protein (HV69-70del), His Tag at 2 µg/mL (100 µL/well) can bind Biotinylated Human ACE2, His,Avitag with a linear range of 0.4-13 ng/mL.

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