Datasheet for ABIN6952630

SARS-CoV-2 Spike S1 Protein (RBD, V367F) (His tag)

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Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike S1
Protein Characteristics:	RBD, V367F
Origin:	SARS Coronavirus-2 (SARS-CoV-2)
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 Spike S1 protein is labelled with His tag.
Application:	ELISA, SDS-PAGE (SDS)

Product Details

Purpose:	SARS-CoV-2 (COVID-19) S protein RBD (V367F), His Tag
Sequence:	AA 319-541
Characteristics:	SARS-CoV-2 S protein RBD (V367F), His Tag (SPD-S52H4) is expressed from human 293 cells (HEK293). It contains AA Arg 319 - Phe 541 (Accession # QHD43416.1 (V367F). Predicted N-terminus: Arg 319 This protein carries a polyhistidine tag at the C-terminus. The V367F mutation in the RBD of Spike protein shows a higher binding affinity to human ACE2.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	SARS-CoV-2 Spike S1
Abstract:	SARS-CoV-2 Spike S1 Products
Target Type:	Viral Protein
Background:	It's been reported that SARS-CoV-2 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.
Molecular Weight:	27.0 kDa
Gene ID:	43740568
UniProt:	P0DTC2

Application Details

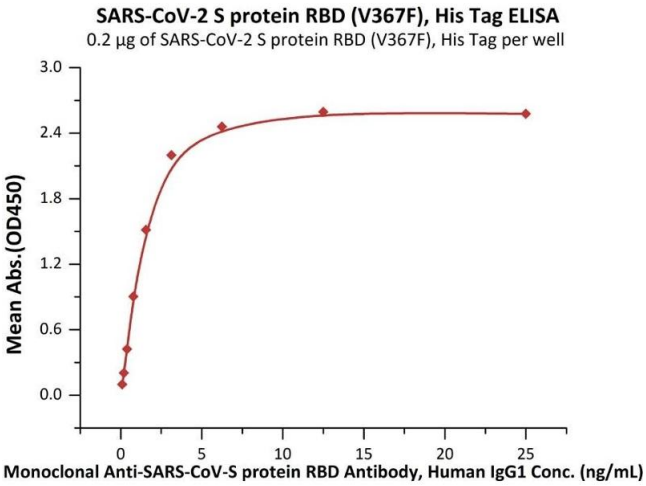
Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	For long term storage, the product should be stored at lyophilized state at -20°C or lower. This product is stable after storage at: 4-8°C for 12 months in lyophilized state, -70°C for 3 years under sterile conditions after reconstitution.

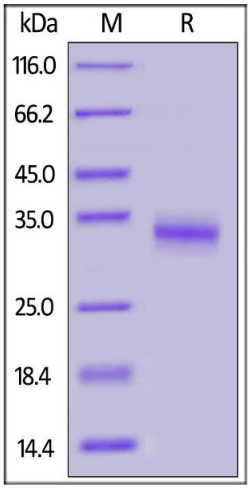
Publications

Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)



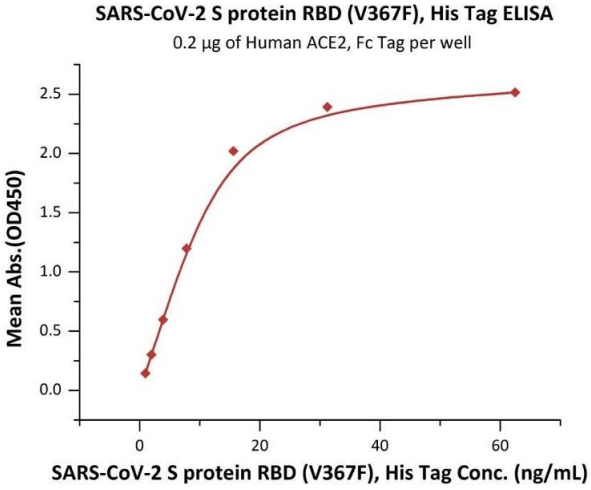
ELISA

Image 1. Immobilized SARS-CoV-2 S protein RBD (V367F), His Tag (ABIN6952630) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-SARS-CoV-S protein RBD Antibody, Human IgG1 with a linear range of 0.1-3 ng/mL (Routinely tested).



SDS-PAGE

Image 2. SARS-CoV-2 S protein RBD (V367F), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .



ELISA

Image 3. Immobilized Human ACE2, Fc Tag (ABIN6952465) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 S protein RBD (V367F), His Tag (ABIN6952630) with a linear range of 1-16 ng/mL (QC tested).