

Datasheet for ABIN7274385

SARS-CoV-2 Spike Protein (N501Y, RBD) (His tag)



[Go to Product page](#)

4 Images

Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	N501Y, RBD
Origin:	SARS Coronavirus-2 (SARS-CoV-2)
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with His tag.

Product Details

Purpose:	SARS-COV-2 Spike RBD (N501Y) Protein
Sequence:	Arg319-Phe541 (N501Y)
Characteristics:	Recombinant SARS-COV-2 Spike RBD (N501Y) Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Arg319-Phe541(N501Y).
Purity:	> 95 % as determined by Tris-Bis PAGE, > 95 % as determined by HPLC
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.
Biological Activity Comment:	Immobilized SARS-COV-2 Spike RBD (N501Y) , His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 12.7ng/ml determined by ELISA. The affinity constant of 1.74nM as determined in SPR assay (Biacore T200). See testing image for detail.

Target Details

Target: SARS-CoV-2 Spike

Abstract: [SARS-CoV-2 Spike Products](#)

Target Type: Viral Protein

Background: The ongoing coronavirus disease 2019 (COVID-19) pandemic has prioritized the development of small-animal models for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The resulting mouse-adapted strain at passage 6 (called MASCP6) showed increased infectivity in mouse lung and led to interstitial pneumonia and inflammatory responses in both young and aged mice after intranasal inoculation. Deep sequencing revealed a panel of adaptive mutations potentially associated with the increased virulence. In particular, the N501Y mutation is located at the receptor binding domain (RBD) of the spike protein.

Molecular Weight: 26.2 kDa. Due to glycosylation, the protein migrates to 36-40 kDa based on Tris-Bis PAGE result.

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

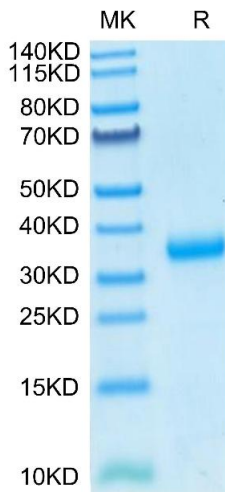
Reconstitution: Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/mL is recommended. Dissolve the lyophilized protein in distilled water.

Buffer: Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8 % trehalose is added as protectant before lyophilization.

Storage: -20 °C,-80 °C

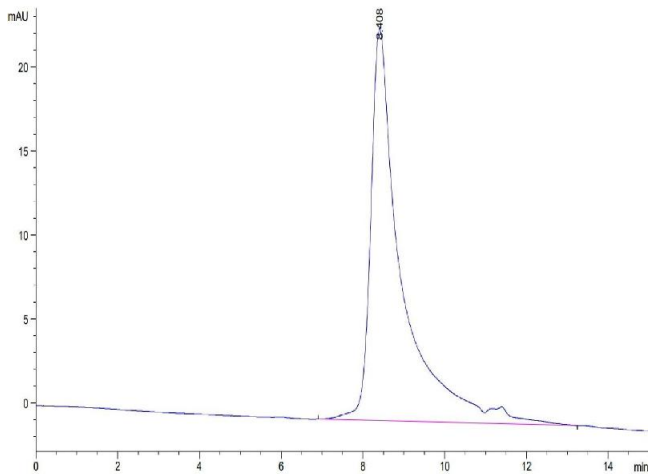
Storage Comment: -20 to -80°C for 12 months as supplied from date of receipt., -80°C for 3-6 months after reconstitution., 2-8°C for 2-7 days after reconstitution., Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Expiry Date: 12 months



SDS-PAGE

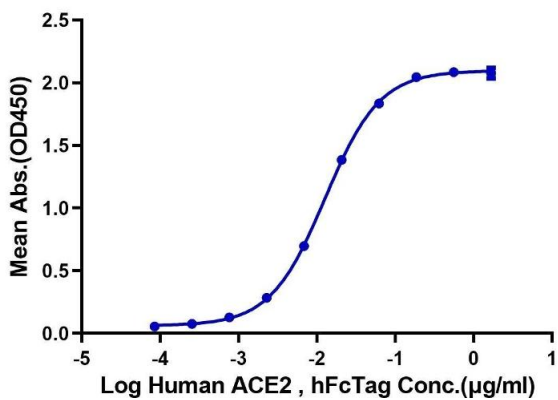
Image 1. SARS-COV-2 Spike RBD (N501Y) on Tris-Bis PAGE under reduced condition. The purity is greater than 95 % .



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 2. The purity of SARS-COV-2 Spike RBD (N501Y) is greater than 95 % as determined by SEC-HPLC.

SARS-COV-2 Spike RBD (N501Y), His Tag ELISA
0.05µg SARS-COV-2 Spike RBD (N501Y), His Tag Per Well



ELISA

Image 3. Immobilized SARS-COV-2 Spike RBD (N501Y), His Tag at 0.5 µg/mL (100 µL/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 12.7 ng/mL determined by ELISA.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN7274385.