

Datasheet for ABIN7072153

SARS-CoV-2 Spike Protein (BA.2 - Omicron) (His tag)[Go to Product page](#)

4 Images

Overview

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

Product Details

Purpose:	SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) (MALS verified)
Characteristics:	<p>SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) is expressed from human 293 cells (HEK293). It contains AA Arg 319 - Lys 537 (Accession # QHD43416.1 (G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, S477N, T478K, E484A, Q493R, Q498R, N501Y, Y505H)). The spike mutations are identified on the SARS-CoV-2 Omicron variant (Pango lineage: BA.2; GISAID clade: GRA; Nextstrain clade: 21L). This protein carries a polyhistidine tag at the C-terminus.</p>
Purity:	> 95% as determined by SDS-PAGE. > 90% as determined by SEC-MALS.
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
Abstract:	SARS-CoV-2 Spike Products
Target Type:	Viral Protein
Background:	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.
Molecular Weight:	26.7 kDa

Application Details

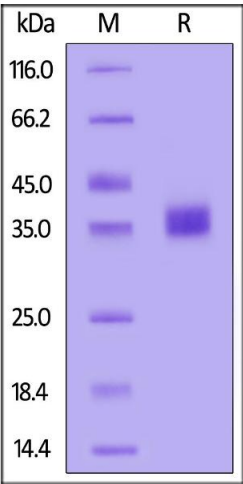
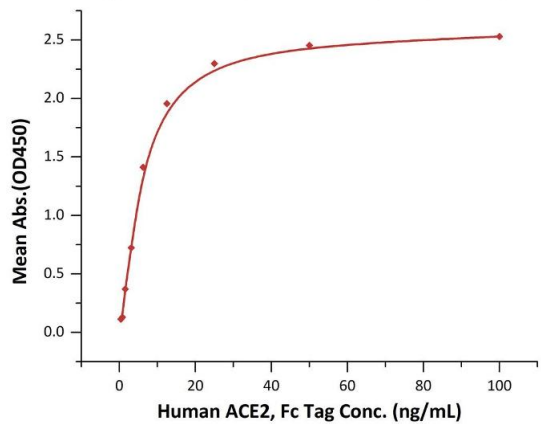
Comment:	The protein has a calculated MW of 26.7 kDa. The protein migrates as 33-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-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 months under sterile conditions after reconstitution.
Expiry Date:	12 months

SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) ELISA

0.1 µg of SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) per well



ELISA

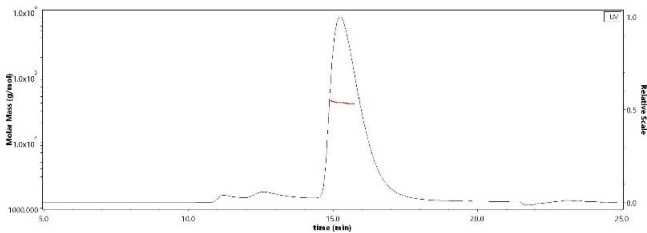
Image 1. Immobilized SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) at 1 µg/mL (100 µL/well) can bind Human ACE2, Fc Tag (ABIN6952459) with a linear range of 0.4-13 ng/mL (Routinely tested).

SDS-PAGE

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

Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3. The purity of SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) is more than 90% and the molecular weight of this protein is around 32-48 kDa verified by SEC-MALS.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN7072153.