

Datasheet for ABIN7041440

**SARS-CoV-2 Spike Protein (B.1.1.529 - Omicron, NTD) (His tag)**[Go to Product page](#)**3** Images

## Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	B.1.1.529 - Omicron, NTD
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 NTD, His Tag (B.1.1.529/Omicron) (MALs verified)
Characteristics:	SARS-CoV-2 Spike NTD, His Tag (B.1.1.529/Omicron) is expressed from human 293 cells (HEK293). It contains AA Ser 13 - Leu 303 (Accession # QHD43416.1(A67V, HV69-70del, T95I, G142D, VYY143-145del, N211del, L212I, ins214EPE). The spike mutations are identified on the SARS-CoV-2 Omicron variant (Pango lineage: B.1.1.529; GISAID clade: GR/484A; Nextstrain clade: 21K). Predicted N-terminus: Ser 13
Purity:	> 95% as determined by SDS-PAGE. > 95% 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

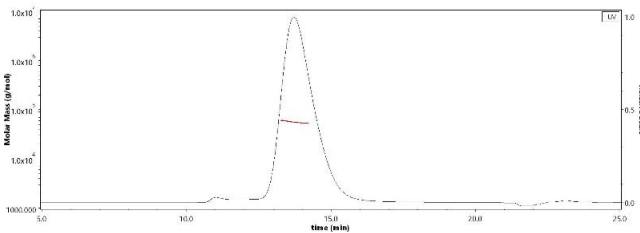
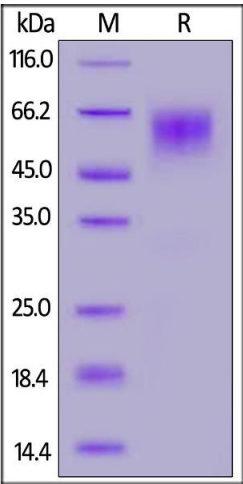
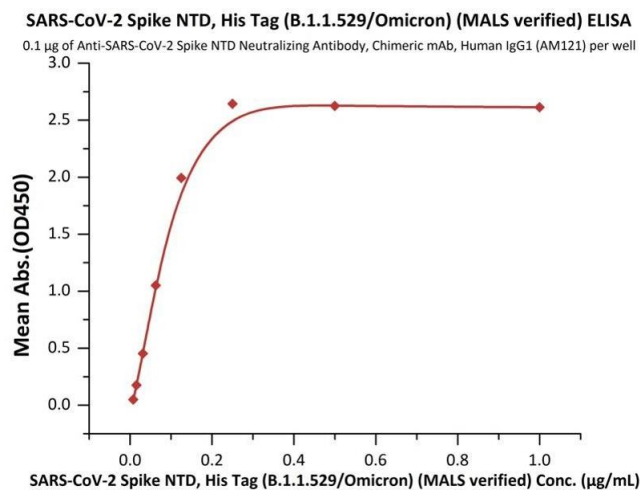
Target:	SARS-CoV-2 Spike
Abstract:	<a href="#">SARS-CoV-2 Spike Products</a>
Target Type:	Viral Protein
Background:	It's been reported that Coronavirus can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane 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:	34.6 kDa

## Application Details

Restrictions:	For Research Use only
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## 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



**ELISA**

**Image 1.** Immobilized Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb at 1 µg/mL (100 µL/well) can bind SARS-CoV-2 Spike NTD, His Tag (B.1.1.529/Omicron) (MALS verified) with a linear range of 0.02-0.1 µg/mL.

**SDS-PAGE**

**Image 2.** SARS-CoV-2 Spike NTD, His Tag (B.1.1.529/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 NTD, His Tag (B.1.1.529/Omicron) is more than 95% verified by SEC-MALS.