

Datasheet for ABIN7273900

**SARS-CoV-2 Spike Protein (BA.2.12.1 - Omicron, RBD) (His tag)**[Go to Product page](#)**3** Images

## Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	BA.2.12.1 - Omicron, 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 (Omicron BA.2.12.1) Protein
Sequence:	Arg319-Phe541 (G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452Q, S477N, T478K, E484A, Q493R, Q498R, N501Y, Y505H)
Characteristics:	Recombinant SARS-Cov-2 Spike RBD (Omicron BA.2.12.1) Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Arg319-Phe541(G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452Q, S477N, T478K, E484A, Q493R, Q498R, N501Y, Y505H).
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 (Omicron BA.2.12.1) , His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 14.3ng/ml

## Product Details

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determined by ELISA. See testing image for detail.

## Target Details

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Target:	SARS-CoV-2 Spike
Abstract:	<a href="#">SARS-CoV-2 Spike Products</a>
Target Type:	Viral Protein
Background:	The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.
Molecular Weight:	26.09 kDa. Due to glycosylation, the protein migrates to 38-48 kDa based on Tris-Bis PAGE result.

## Application Details

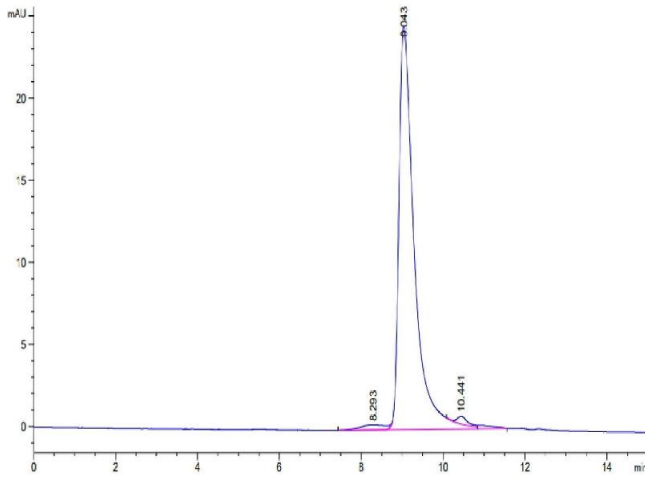
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Restrictions: For Research Use only

## Handling

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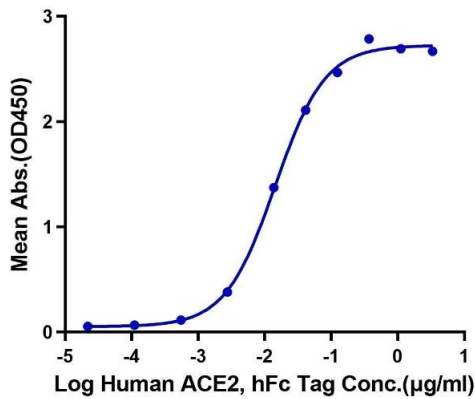
Format:	Lyophilized
Reconstitution:	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/mL is recommended. Dissolve the lyophilized protein in distilled water.
Buffer:	Lyophilized from 0.22µm filtered solution in PBS ( pH 7.4). Normally 8 % trehalose is added as protectant 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



**Size-exclusion chromatography-High Pressure Liquid Chromatography**

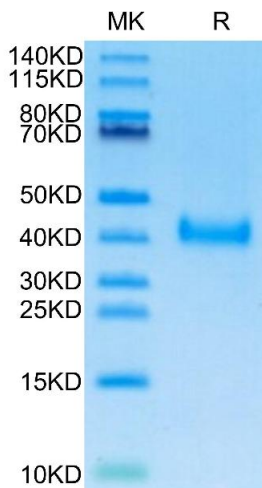
**Image 1.** The purity of SARS-Cov-2 Spike RBD (Omicron BA.2.12.1) is greater than 95 % as determined by SEC-HPLC.

**SARS-Cov-2 Spike RBD (Omicron BA.2.12.1), His Tag ELISA**  
0.2µg SARS-Cov-2 Spike RBD (Omicron BA.2.12.1), His Tag Per Well



**ELISA**

**Image 2.** Immobilized SARS-CoV-2 Spike RBD (Omicron BA.2.12.1) , His Tag at 2 µg/mL (100 µL/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 14.3 ng/mL determined by ELISA.



**SDS-PAGE**

**Image 3.** SARS-Cov-2 Spike RBD (Omicron BA.2.12.1) on Tris-Bis PAGE under reduced condition. The purity is greater than 95 % .