

Datasheet for ABIN7274386

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

## Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	B.1.1.529 - Omicron, Trimer
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 S (Omicron B.1.1.529) Trimer Protein
Sequence:	Val16-Pro1213 (A67V, HV69-70del, T95I, G142D, VYY143-145del, N211del, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K, L981F)
Characteristics:	Recombinant SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val16-Pro1213(A67V, HV69-70del, T95I, G142D, VYY143-145del, N211del, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K, L981F). Proline substitutions (F817P, A892P, A899P, A942P, K986P, V987P) and alanine substitutions (R683A and R685A) are introduced to stabilize the trimeric prefusion state of SARS-CoV-2 S protein and abolish the furin cleavage site, respectively.

## Product Details

---

Purity:	> 95 % as determined by Tris-Bis PAGE
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.
Biological Activity Comment:	Immobilized SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer, His Tag at 1 µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 16.7ng/ml determined by ELISA. See testing image for detail.

## Target Details

---

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:	136.70 kDa. Due to glycosylation, the protein migrates to 140-180 kDa based on Tris-Bis PAGE result.

## Application Details

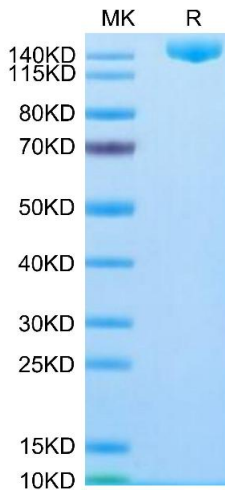
---

Restrictions:	For Research Use only
---------------	-----------------------

## Handling

---

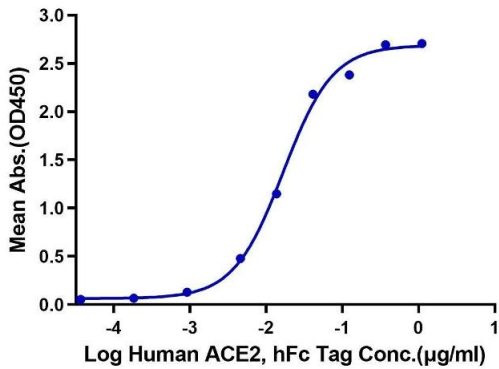
Format:	Lyophilized
Reconstitution:	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/mL is recommended. Dissolve the lyophilized protein in distilled water.
Buffer:	Lyophilized from 0.22µm filtered solution in PBS ( pH 7.4). Normally 8 % trehalose is added as protectant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



**SDS-PAGE**

**Image 1.** SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer on Tris-Bis PAGE under reduced condition. The purity is greater than 95 % .

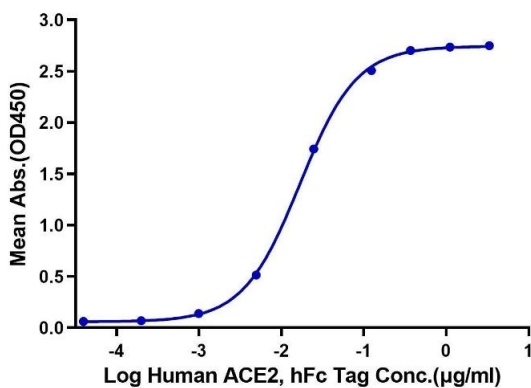
**SARS-COV-2 Spike S(B.1.1.529/Omicron) Trimer, His Tag ELISA**  
0.1µg SARS-COV-2 Spike S(B.1.1.529/Omicron) Trimer, His Tag Per Well



**ELISA**

**Image 2.** Immobilized SARS-COV-2 Spike S (B.1.1.529/Omicron) Trimer, His Tag at 1 µg/mL (100 µ L/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 16.7 ng/mL determined by ELISA.

**SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer, His Tag ELISA**  
0.1µg SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer, His Tag Per Well



**ELISA**

**Image 3.** Immobilized SARS-COV-2 Spike S (Omicron B.1.1.529) Trimer, His Tag at 1 µg/mL (100 µL/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 16.7 ng/mL determined by ELISA.