

# Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529) Protein

Cat. No. COV-VM4SOB

## Description

Recombinant Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus.

## Source

It contains Gln14-Arg683(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).

## Accession

QHO60594.1

## Molecular Weight

The protein has a predicted MW of 77.94 kDa. Due to glycosylation, the protein migrates to 110-120 kDa based on Bis-Tris PAGE result.

## Endotoxin

Less than 1EU per  $\mu\text{g}$  by the LAL method.

## Purity

> 95% as determined by Bis-Tris PAGE

> 95% as determined by HPLC

## Formulation and Storage

### Formulation

Lyophilized from 0.22 $\mu\text{m}$  filtered solution in PBS (pH 7.4). Normally 8% saccharose is added as protectant before lyophilization.

### Reconstitution

Centrifuge the tube before opening. Reconstituting to a concentration more than 100  $\mu\text{g}/\text{ml}$  is recommended. Dissolve the lyophilized protein in distilled water.

### Storage

-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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.

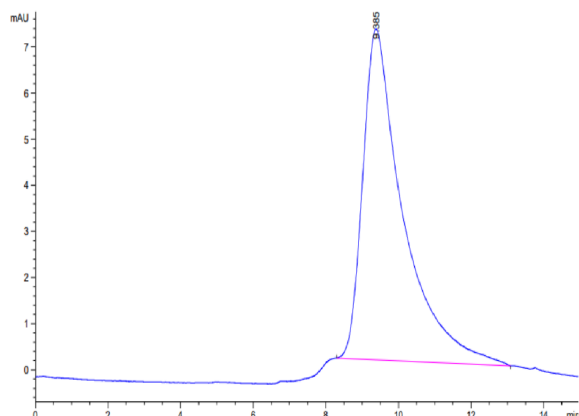
## Assay Data

### Bis-Tris PAGE



Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



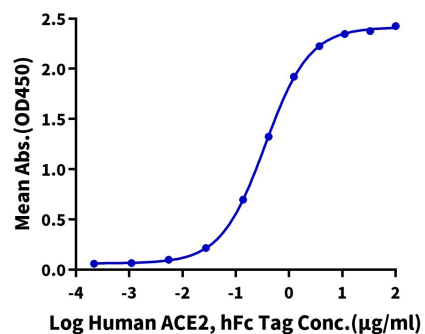
The purity of Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529) is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529), His Tag ELISA**

0.1µg Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529), His Tag Per Well



Immobilized Biotinylated SARS-COV-2 Spike S1 (Omicron B.1.1.529) , His Tag at 1µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 0.35µg/ml determined by ELISA.