

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

Cat. No. COV-VM1SO

Description	
Source	Recombinant SARS-COV-2 Spike S1 (Omicron B.1.1.529) Protein is expressed from HEK293 with His tag at the C-Terminus. 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 76.38 kDa. Due to glycosylation, the protein migrates to 130-145 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

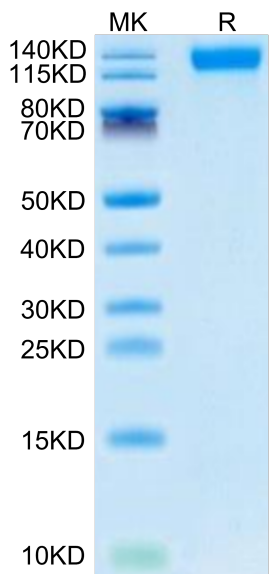
Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized 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



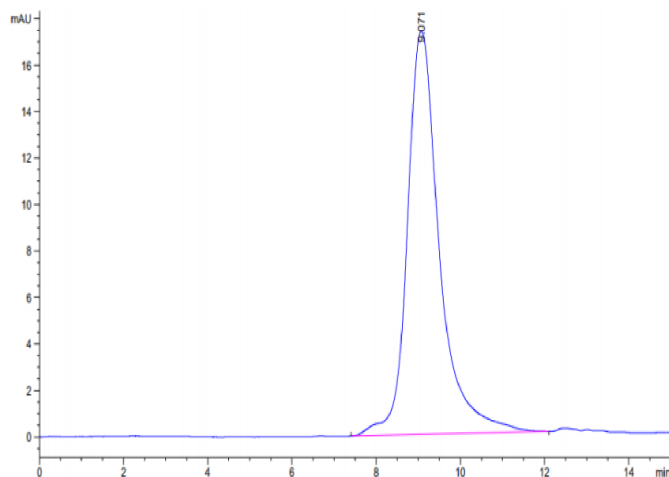
SARS-COV-2 Spike S1 (Omicron B.1.1.529) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

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

Cat. No. COV-VM1SO

## Assay Data

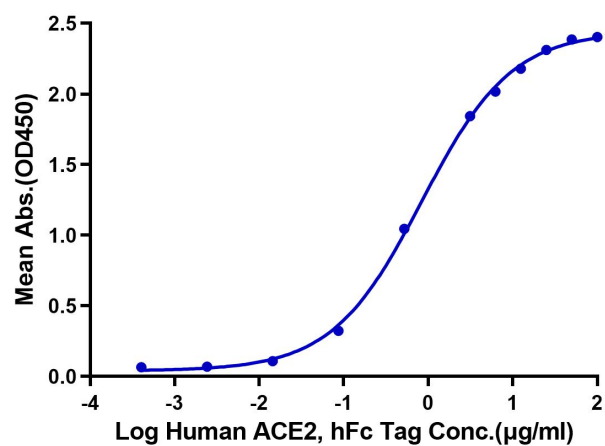


The purity of SARS-COV-2 Spike S1 (Omicron B.1.1.529) is greater than 95% as determined by SEC-HPLC.

## ELISA Data

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

0.2µg SARS-COV-2 Spike S1 (Omicron B.1.1.529) , His Tag Per Well



Immobilized Human ACE2, hFc Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for SARS-COV-2 Spike S1 (Omicron B.1.1.529) , His Tag with the EC50 of 0.8µg/ml determined by ELISA.