

SARS-COV-2 Spike S Trimer Protein

Cat. No. COV-VM2SS



Description

Source	Recombinant SARS-COV-2 Spike S Trimer Protein is expressed from HEK293 with monomeric hFc tag at the C-Terminus. It contains Val16-Glu1188.
Accession	QHD43416.1
Molecular Weight	The protein has a predicted MW of 158.3 kDa. Due to glycosylation, the protein migrates to 230-250 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

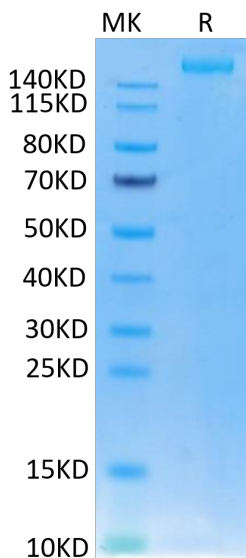
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

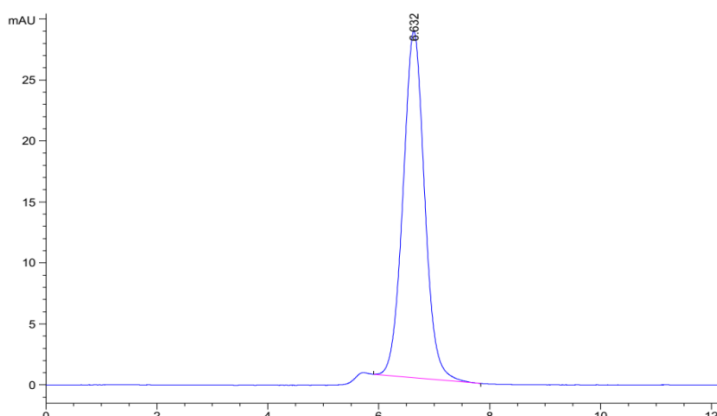
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



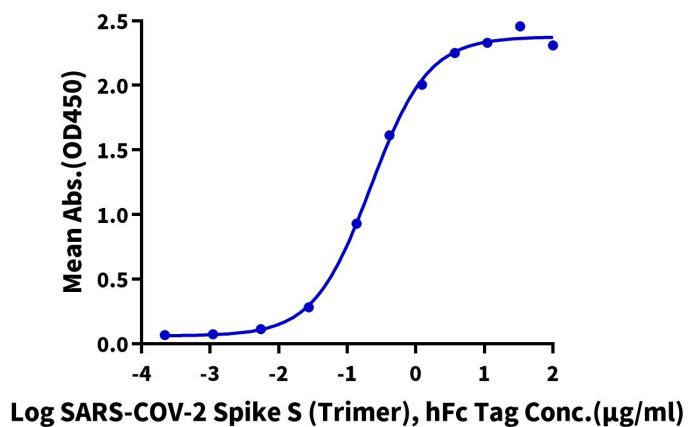
The purity of SARS-COV-2 Spike S (Trimer) is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

SARS-COV-2 Spike S (Trimer), hFc Tag ELISA

0.5µg Human ACE2, His Tag Per Well



Immobilized Human ACE2, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for SARS-COV-2 Spike S (Trimer) , hFc Tag with the EC50 of 0.22µg/ml determined by ELISA.