

# SARS-COV-2 Spike S Trimer (D614G) Protein

Cat. No. COV-VM4LG



## Description

<b>Source</b>	Recombinant SARS-COV-2 Spike S Trimer(D614G) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Val16-Glu1188 (D614G).
<b>Accession</b>	QHD43416.1
<b>Molecular Weight</b>	The protein has a predicted MW of 136.7 kDa. Due to glycosylation, the protein migrates to 175-230 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

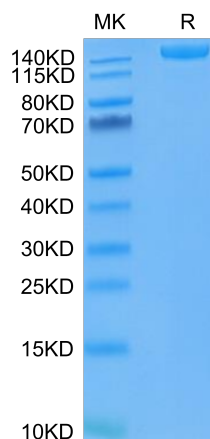
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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 SARS-CoV-2 spike (S) protein variant D614G supplanted the ancestral virus worldwide, reaching near fixation in a matter of months. Recently, that D614G was been found more infectious than the ancestral form on human lung cells, colon cells, and on cells rendered permissive by ectopic expression of human ACE2 or of ACE2 orthologs from various mammals, including Chinese rufous horseshoe bat and Malayan pangolin.

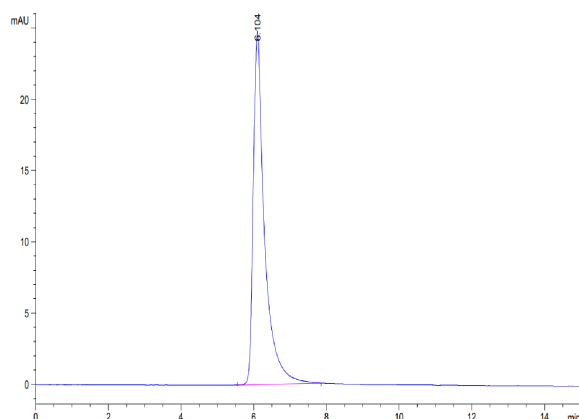
## Assay Data

### Bis-Tris PAGE



SARS-COV-2 Spike S Trimer (D614G) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of SARS-COV-2 Spike S Trimer (D614G) is greater than 95% as determined by SEC-HPLC.

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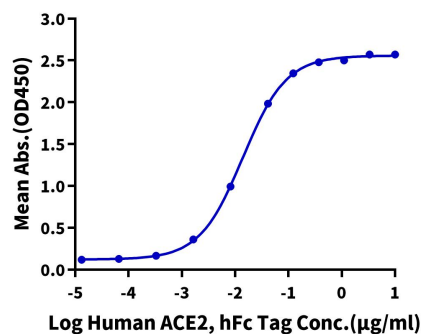


## Assay Data

### ELISA Data

#### SARS-COV-2 Spike S (D614G), His Tag ELISA

0.1  $\mu$ g SARS-COV-2 Spike S (D614G), His Tag Per Well



Immobilized SARS-COV-2 Spike S Trimer (D614G), His Tag at 1  $\mu$ g/ml (100  $\mu$ l/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC<sub>50</sub> of 14.0ng/ml determined by ELISA.