

# SARS-COV-2 Spike S1 (D614G) Protein

Cat. No. COV-VM4SG

## Description

<b>Source</b>	Recombinant SARS-COV-2 Spike S1 (D614G) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gln14-Arg683(D614G).
<b>Accession</b>	QHD43416.1
<b>Molecular Weight</b>	The protein has a predicted MW of 77.9 kDa. Due to glycosylation, the protein migrates to 110-120 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 3-6 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.

## Background

The SARS-CoV-2 spike (S) protein is the target of vaccine design efforts to end the COVID-19 pandemic. Despite a low mutation rate, isolates with the D614G substitution in the S protein appeared early during the pandemic, and are now the dominant form worldwide. Here, we analyze the D614G mutation in the context of a soluble S ectodomain construct.

## Assay Data

### Bis-Tris PAGE



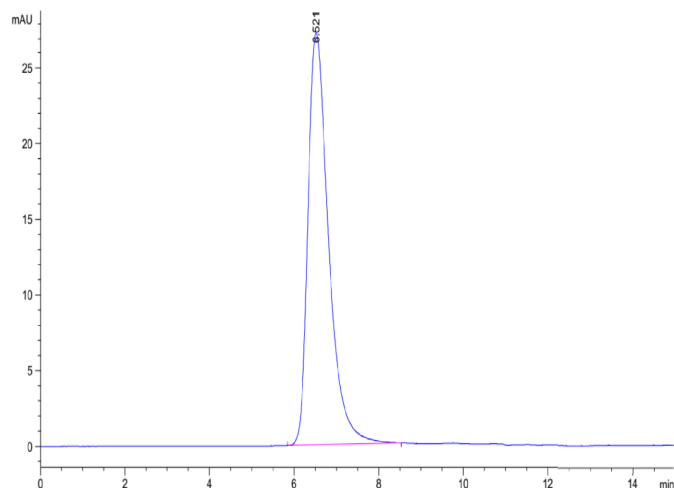
SARS-COV-2 Spike S1 (D614G) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

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## Assay Data

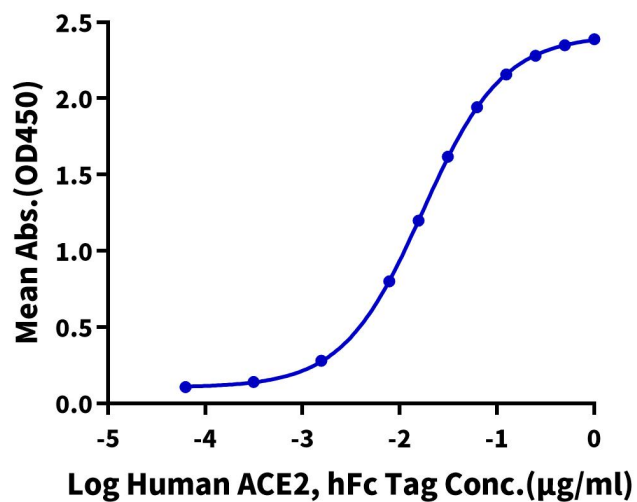


The purity of SARS-COV-2 Spike S1 (D614G) is greater than 95% as determined by SEC-HPLC.

## ELISA Data

### SARS-COV-2 Spike S1 (D614G), His Tag ELISA

0.2µg SARS-COV-2 Spike S1 (D614G), His Tag Per Well



Immobilized SARS-CoV-2 S1 (D614G) , His Tag at 2µg/ml (100µl/Well) on plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 17.2ng/ml determined by ELISA.