

# SARS-COV-2 Spike S1 Protein

Cat. No. COV-VM2S1

## Description

<b>Source</b>	Recombinant SARS-COV-2 Spike S1 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Val16-Arg685.
<b>Accession</b>	QHO60594.1
<b>Molecular Weight</b>	The protein has a predicted MW of 101.6 kDa. Due to glycosylation, the protein migrates to 115-130 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

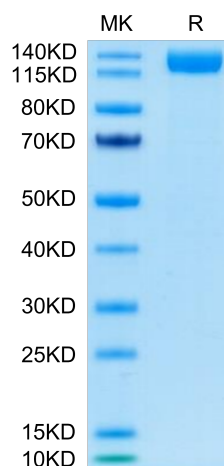
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at $-80^{\circ}\text{C}$ . Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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

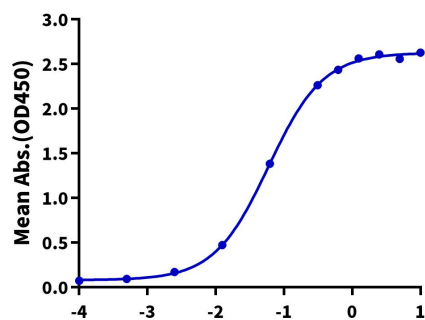


SARS-COV-2 Spike S1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

#### SARS-COV-2 Spike S1, hFc Tag ELISA

0.5 $\mu\text{g}$  Human ACE2, His Tag Per Well

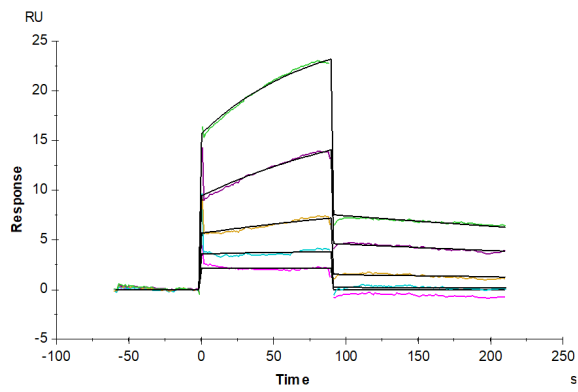


Immobilized Human ACE2, His Tag at 5 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}/\text{well}$ ) on the plate. Dose response curve for SARS-COV-2 Spike S1, hFc Tag with the EC50 of 59.7ng/ml determined by ELISA (QC Test).

Log SARS-COV-2 Spike S1, hFc Tag Conc. ( $\mu\text{g}/\text{ml}$ )

Assay Data

SPR Data



Biotinylated Human ASGR1, His Tag captured on CM5 Chip via Anti-his antibody can bind SARS-COV-2 Spike S1, hFc Tag with an affinity constant of 0.132  $\mu$ M as determined in SPR assay (Biacore T200).