

SARS Spike S1 Protein

Cat. No. SAR-VM5S1

Description

Source	Recombinant SARS spike S1 protein is expressed from HEK293 with hFc tag and Avi tag at the C-Terminus. It contains Ser14-Arg667.
Accession	P59594
Molecular Weight	The protein has a predicted MW of 100.6 kDa. Due to glycosylation, the protein migrates to 120-140 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

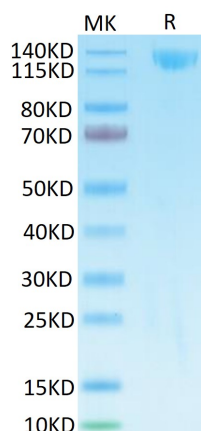
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized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

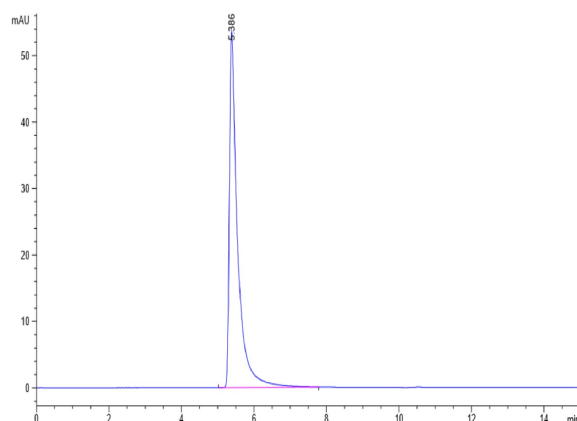
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



The purity of SARS spike S1 is greater than 95% as determined by SEC-HPLC.

SARS Spike S1 Protein

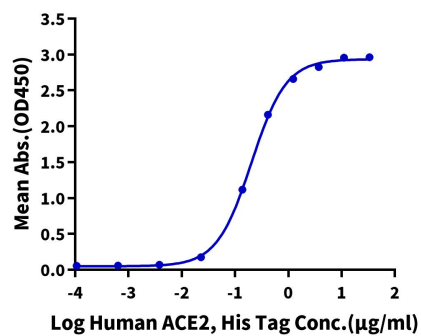
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Assay Data

ELISA Data

SARS Spike S1, hFc Tag ELISA

0.1 μ g SARS Spike S1, hFc Tag Per Well



Immobilized SARS Spike S1, hFc Tag at 1 μ g/ml (100 μ l/well) on the plate. Dose response curve for Human ACE2, His Tag with the EC50 of 0.21 μ g/ml determined by ELISA.