SARS-COV-2 Spike S1 Protein

Cat. No. COV-VM1S1



Description	
Source	Recombinant SARS-COV-2 Spike S1 Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Gln14-Arg683.
Accession	QHO60594.1
Molecular Weight	The protein has a predicted MW of 76.1 kDa. Due to glycosylation, the protein migrates to 115-140 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE
	> 95% as determined by HPLC

Formulation and Storage

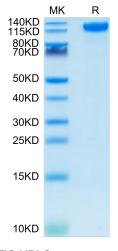
Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μ g/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt20 to -80°C for 3-6 months in unopened state 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 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

Tris-Bis PAGE

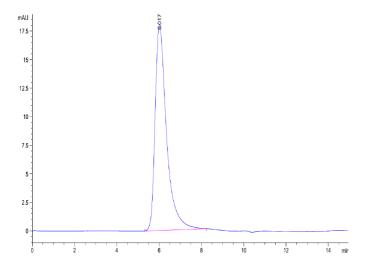


SARS-COV-2 Spike S1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



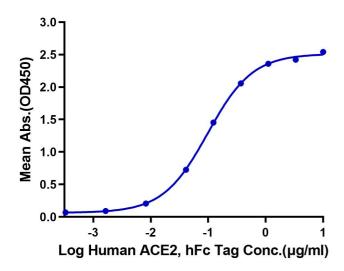
Assay Data



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

ELISA Data

SARS-COV-2 Spike S1, His Tag ELISA 0.1SARS-COV-2 Spike S1, His Tag Per Well



Immobilized SARS-COV-2 Spike S1, His Tag at $1\mu g/ml$ (100 $\mu l/well$) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 98.3ng/ml determined by ELISA.