SARS-COV-2 Spike S1 (D614G) Protein

Cat. No. COV-VM4SG

Description

Source	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).
Accession	QHD43416.1
Molecular Weight	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.
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

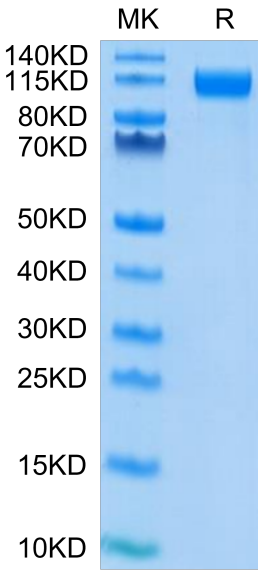
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

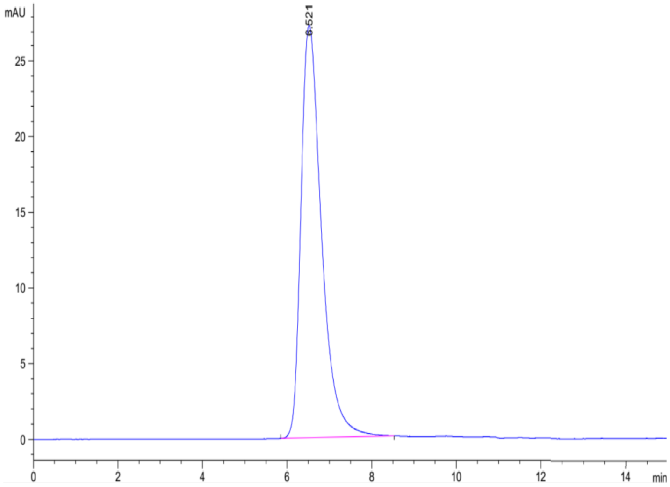
Bis-Tris PAGE



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

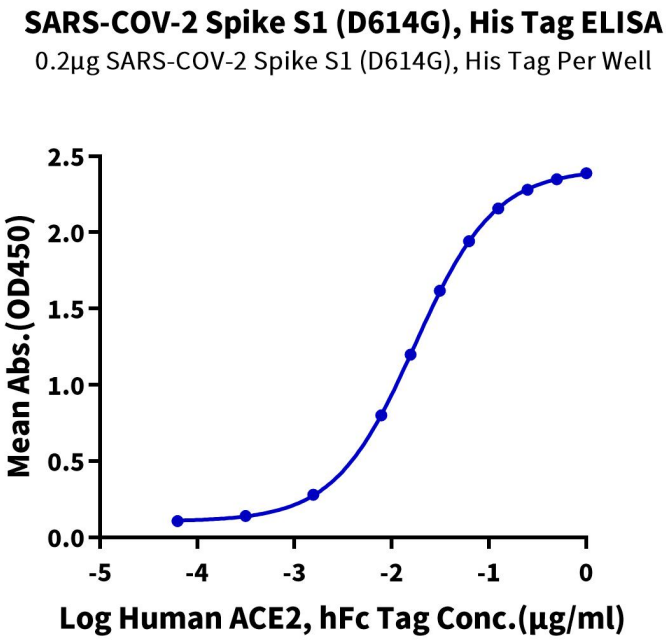
SEC-HPLC

Assay Data



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

ELISA Data



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.