SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) Protein

Cat. No. GPS-VM1S1

Description

Source	Recombinant SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Gln14-Arg683(L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y).
Accession	QHD43416.1
Molecular Weight	The protein has a predicted MW of 76.11 kDa. Due to glycosylation, the protein migrates to 100-130 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

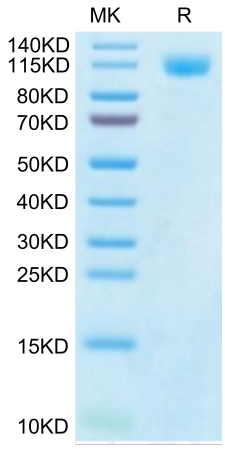
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled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

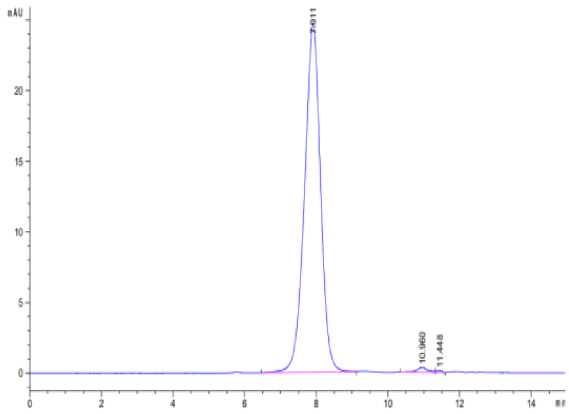
Assay Data

Bis-Tris PAGE



SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) is greater than 95% as determined by SEC-HPLC.

SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) Protein

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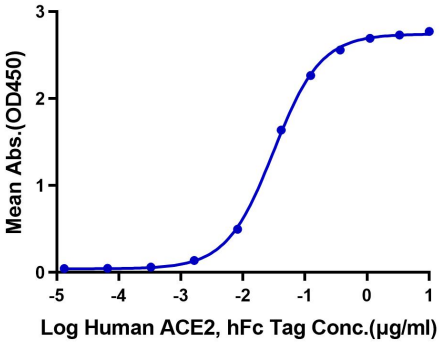
Assay Data

ELISA Data

SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2), His Tag ELISA

0.1μg SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2), His Tag Per Well



Immobilized SARS-CoV-2 Spike S1 (Gamma P.1/P.1.1/P.1.2) , His Tag at 1μg/ml (100μl/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 31.1ng/ml determined by ELISA.