

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

Cat. No. GP1-VM1BD

## Description

<b>Source</b>	Recombinant SARS-CoV-2 Spike RBD (Gamma P.1/P.1.1/P.1.2) Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Arg319-Phe541(K417T, E484K, N501Y).
<b>Accession</b>	QHD43416.1
<b>Molecular Weight</b>	The protein has a predicted MW of 26.21 kDa. Due to glycosylation, the protein migrates to 35-40 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

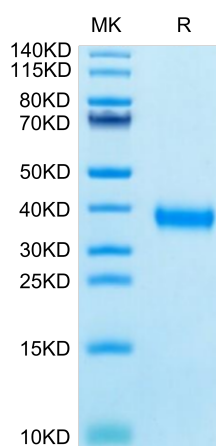
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

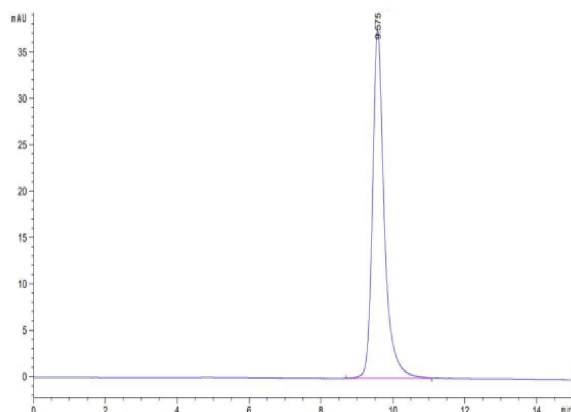
## Assay Data

### Bis-Tris PAGE



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

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

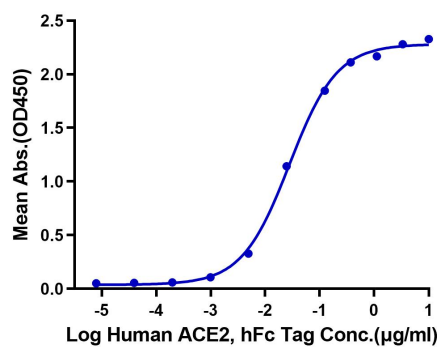
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## Assay Data

### ELISA Data

**SARS-CoV-2 Spike RBD (Gamma P.1/P.1.1/P.1.2), His Tag ELISA**  
0.05µg SARS-CoV-2 Spike RBD (Gamma P.1/P.1.1/P.1.2), His Tag Per Well



Immobilized SARS-CoV-2 Spike RBD (Gamma P.1/P.1.1/P.1.2) , His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 27.7ng/ml determined by ELISA.