

Synonym

Spike,S protein RBD,Spike glycoprotein Receptor-binding domain,S glycoprotein RBD,Spike protein RBD,COVID-19

Source

SARS-CoV-2 S protein RBD, His Tag (SPD-C52H2) is expressed from human 293 cells (HEK293).

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 24.7 kDa. The protein migrates as 30-35 kDa under reducing (R) condition (SDS-PAGE) due to Glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Delivered as bulk protein in a 0.2 µm filtered solution of PB, pH7.4 .

Contact us for customized product form or formulation.

Storage

*Please avoid repeated freeze-thaw cycles.*

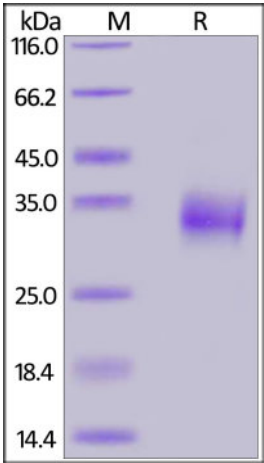
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping

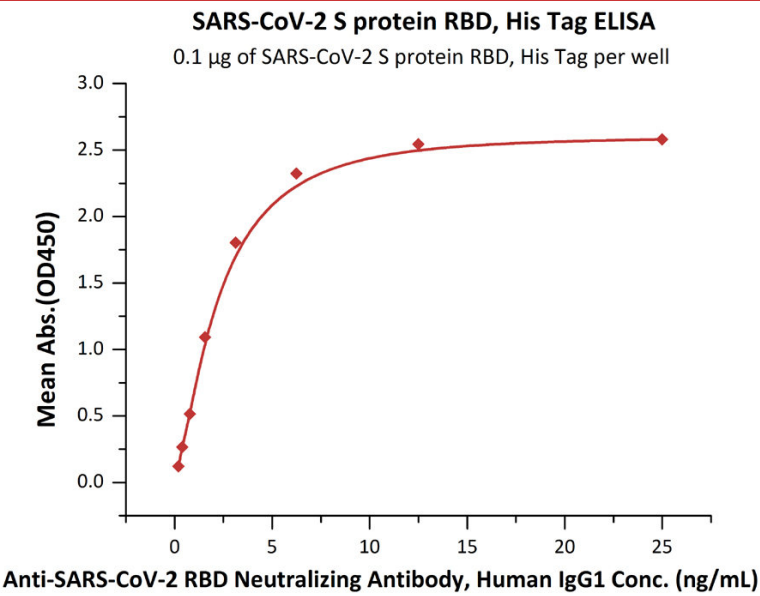
*This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.*

SDS-PAGE



SARS-CoV-2 S protein RBD, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. [SPD-C52H2](#)) at 1 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 RBD Neutralizing Antibody, Human IgG1 (Cat. No. [SAD-S35](#)) with a linear range of 0.2-3 ng/mL (QC tested).

Background

It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

References

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.