

Synonym

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

Source

SARS-CoV-2 S protein RBD, His Tag (SPD-C52H1) 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 26.5 kDa. The protein migrates as 32 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in 10 mM PB, pH7.4.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

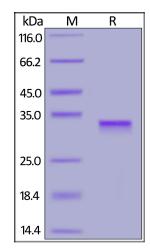
Storage

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.

SDS-PAGE

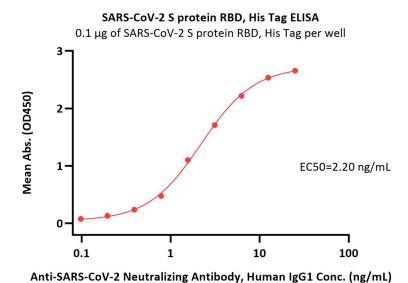


SARS-CoV-2 S protein RBD, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

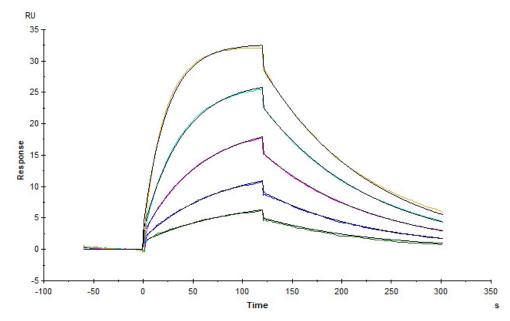






Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) at 1 μ g/mL (100 μ L/well) can bind Anti-SARS-CoV-2 Neutralizing Antibody, Human IgG1 (Cat. No. SAD-S35) with a linear range of 0.1-3 ng/mL (QC tested).

Bioactivity-SPR



Human ACE2, Fc Tag (Cat. No. AC2-H5257) captured on CM5 chip via Antihuman IgG Fc antibodies surface can bind SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) with an affinity constant of 17.3 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Background

It's been reported that Coronavirus 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.

