

RP01304

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Recombinant SARS-CoV Spike RBD Protein

Catalog No.: RP01304

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
SARS-CoV	1489668	P59594

Tags

C-mFc

Synonyms

Spike;Spike RBD;Spike S1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening.
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

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.

Basic Information

Description

Recombinant SARS-CoV Spike RBD Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Arg306-Phe527) of sars-cov Spike RBD (Accession #NP_828851.1) fused with a P59594.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV Spike RBD at 2 μg/mL (100 μL/well) can bind Human ACE2 (Catalog: RP01266) with a linear range of 0.1-11.56 ng/mL.

Storage

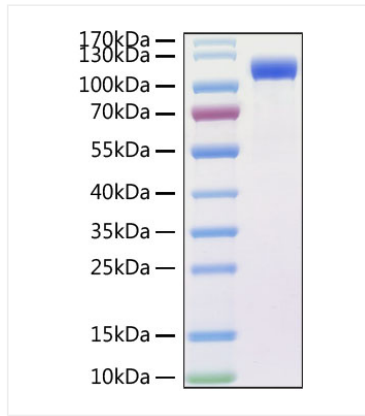
Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

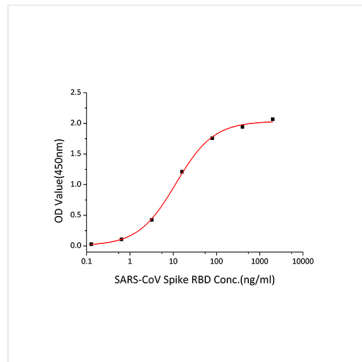


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Validation Data



Recombinant SARS-CoV Spike RBD Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-120 kDa.



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