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# **Recombinant SARS-CoV Spike RBD Protein**

Catalog No.: RP01304 Recombinant

### **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 1489668 P59594

**Tags** C-mFc

Synonyms

Spike;Spike RBD;Spike S1

#### **Product Information**

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

#### **Endotoxin**

 $< 0.1 \; \text{EU/}\mu\text{g}$  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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### Contact

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## **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.

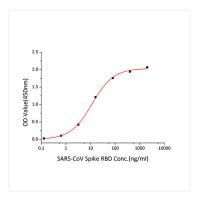
#### **Bio-Activity**

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

#### Storage

Store at  $-20^{\circ}$ C. Store the lyophilized protein at  $-20^{\circ}$ C to  $-80^{\circ}$ C up to 1 year from the date of receipt. <br/> <br/> After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

# **Validation Data**



Immobilized SARS-CoV Spike RBD at  $2\mu g/mL$  (100 $\mu L/well$ ) can bind Human ACE2 (Catalog: RP01266) with a linear range of 0.1-11.56 ng/mL.