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## **Recombinant SARS-CoV-2 Spike S1 Protein**

Catalog No.: RP01265 Recombinant

## **Sequence Information**

Species Gene ID Swiss Prot

HEK293 cells 43740568

**Tags** 

C-His

## **Synonyms**

Envelope;SARS-CoV-2 Spike RBD (N501Y);Spike;Spike ECD;Spike RBD;Spike S1;Spike S2;Spike S2 ECD;S1-RBD protein;NCP-CoV RBD Protein;novel coronavirus RBD Protein;2019-nCoV RBD Protein;S glycoprotein Subunit1 RBD Protein

## **Product Information**

Source Purification

PAGE.

> 90% by SDS-

## **Endotoxin**

HEK293 cells

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

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. or Supplied as a 0.22 µm filtered solution in PBS, pH 7.4.Contact us for customized product form or formulation.

#### 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**

## **Basic Information**

#### Description

Recombinant SARS-CoV-2(2019-nCoV) Spike S1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val11-Arg682) of SARS-COV-2(2019-nCoV) Spike S1 (Accession  $\#YP_009724390.1$ ) fused with a  $6\times His$  tag at the C-terminus.

#### **Bio-Activity**

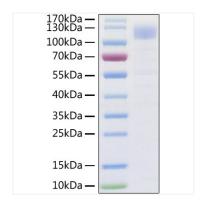
1.Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike S1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind recombinant Human ACE2 with a linear range of 0.03-7.12 ng/mL.|2.Immobilized Human ACE2 on COOH Chip can bind SARS-COV-2 Spike S1 with an affinity constant of 27.3 nM as determined in a SPR assay (Nicoya OpenSPR).

#### Storage

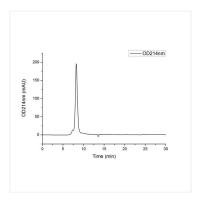
Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. <br/> -80°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

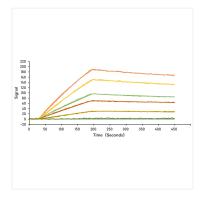
## **Validation Data**



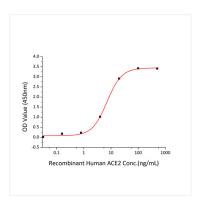
Recombinant SARS-CoV-2 Spike S1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.



The purity of SARS-COV-2 Spike S1 Protein with His tag (Cat.RP01265) was greater than 90% as determined by SEC-HPLC.



Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 27.3 nM as determined in a SPR assay (Nicoya OpenSPR).



Immobilized SARS-CoV-2 Spike S1 at  $2\mu g/mL$  (100  $\mu L/well$ ) can bind recombinant Human ACE2 with a linear range of 0.03-7.12 ng/mL.