

# Recombinant SARS-CoV-2 Spike RBD Protein

Catalog No.: RP01271 **Recombinant**

## Sequence Information

**Species**    **Gene ID**    **Swiss Prot**  
SARS-CoV-2    43740568

### Tags

C-mFc

### 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

<b>Source</b>	<b>Purification</b>
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥95 % as determined by HPLC.

<b>Calculated MW</b>	<b>Observed MW</b>
50.67 kDa	60 kDa

### 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. 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 tube 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 free-thaw cycles.

## Background

### Basic Information

#### Description

Recombinant SARS-CoV-2(2019-nCoV) Spike RBD Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Arg319-Phe541) of SARS-COV-2(2019-nCoV) Spike RBD (Accession #YP\_009724390.1) fused with a mFc tag at the C-terminus.

#### Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 Protein at 2 μg/mL (100 μL/well) can bind Recombinant SARS-COV-2 Spike RBD-mFc Protein, the EC<sub>50</sub> of Recombinant SARS-COV-2 Spike RBD-mFc Protein is 2.58 ng/mL.

#### Storage

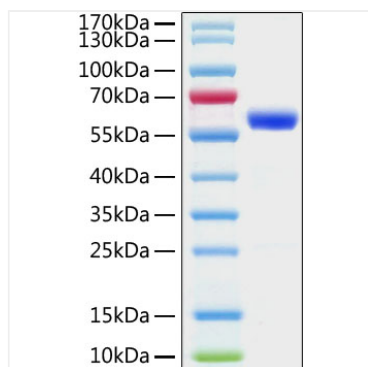
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

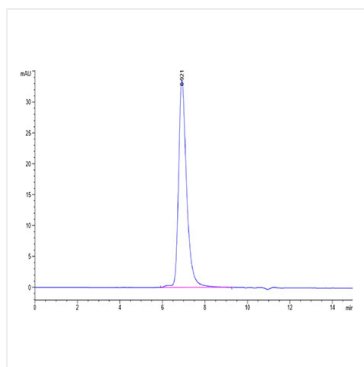
☎		400-999-6126
✉		<a href="mailto:cn.market@abclonal.com.cn">cn.market@abclonal.com.cn</a>
🌐		<a href="http://www.abclonal.com.cn">www.abclonal.com.cn</a>

\* 本资料仅供参考，不作为任何投资建议。

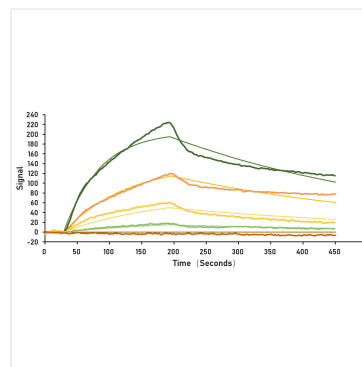
## Validation Data



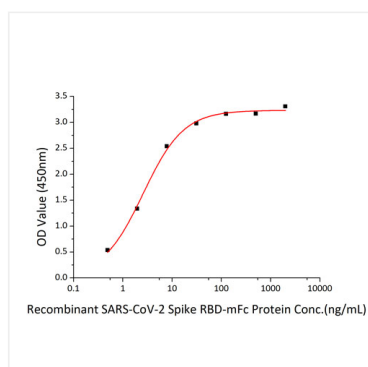
Recombinant SARS-CoV-2 Spike RBD Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



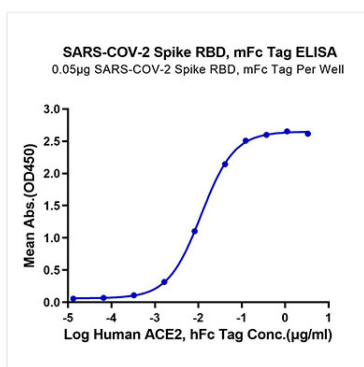
The purity of SARS-CoV-2 Spike RBD is greater than 95% as determined by SEC-HPLC.



Immobilized Human ACE2 on COOH Chip, can bind SARS-CoV-2 Spike S1 with an affinity constant of 6.58 nM as determined in a SPR assay (Nicoya OpenSPR).



Immobilized Recombinant Human ACE2 Protein at 2 $\mu$ g/mL (100  $\mu$ L/well) can bind Recombinant SARS-CoV-2 Spike RBD-mFc Protein. The  $EC_{50}$  of Recombinant SARS-CoV-2 Spike RBD-mFc Protein is 2.58 ng/mL.



Immobilized SARS-CoV-2 Spike RBD at 0.5 $\mu$ g/mL (100 $\mu$ L/Well). Dose response curve for Human ACE2, hFc Tag with the  $EC_{50}$  of 11.6ng/mL determined by ELISA.