# Recombinant SARS-CoV-2 Spike S1 Protein

**Catalog No.: RP01261**

www.abclonal.com

## Sequence Information

**Species**
SARS-CoV-2

**Gene ID**
43740568

**Swiss Prot**

**Tags**
C-His&Avi

**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**
HEK293 cells

**Purification**
≥ 95 % as determined by SDS-PAGE;≥ 95 % as determined by HPLC.

**Calculated MW**
77.67 kDa

**Observed MW**
110-120 kDa

**Endotoxin**
< 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

## Background

The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates thisinteraction.The S protein plays key parts in the induction of neutralizing-antibody and T-cellresponses, as well as protective immunity.

## 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 (Gln14-Arg683) of SARS-COV-2(2019-nCoV) Spike S1 (Accession #YP_009724390.1) fused with a 6×His tag and Avi at the C-terminus.

**Activity**
1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant SARS-CoV-2 Spike S1 at 2 μg/mL (100 μL/well) can bind recombinant Human ACE2 with a linear range of 0.15-6.85 ng/mL.
2.Immobilized Human ACE2 on COOH Chip can bind SARS-COV-2 Spike S1 with an affinity constant of 24.5 nM as determined in a SPR assay (Nicoya OpenSPR).

**Shipping**
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

**Storage**
Store at -20℃

**Operational Notes**
For your safety and health, please wear a lab coat and disposable gloves for handling.

**Contact**

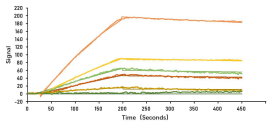
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn



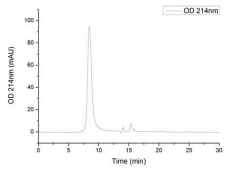
For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

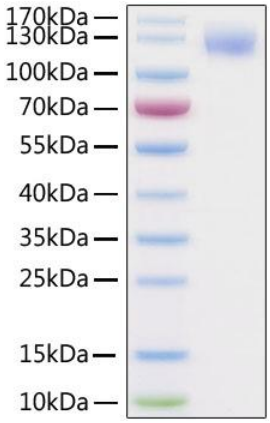
## Validation Data



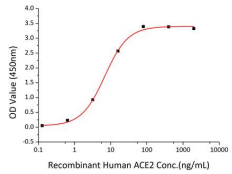
Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 24.5 nM as determined in a SPR assay (Nicoya OpenSPR).




The purity of SARS-COV-2 Spike S1 Protein with His and Avi tag (Cat.RP01261) was greater than 95% as determined by SEC-HPLC.




Recombinant SARS-CoV-2 Spike S1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.




Immobilized Recombinant SARS-CoV-2 Spike S1 at 2μg/mL (100 μL/well) can bind recombinant Human ACE2 with a linear range of 0.15-6.85 ng/mL.