

# Recombinant SARS-CoV-2 Spike S1 Protein

Catalog No.: RP01265 Recombinant

# **Sequence Information**

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

HEK293 cells

> 90% 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. 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 votex 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**

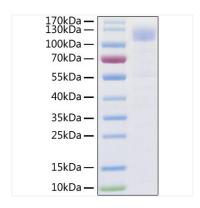
1.Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike S1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind recombinant Human ACE2 with a linear range of 0.03-7.12 ng/mL.|2.Immobilized Human ACE2 on COOH Chip can bind SARS-COV-2 Spike S1 with an affinity constant of 27.3 nM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

# Storage

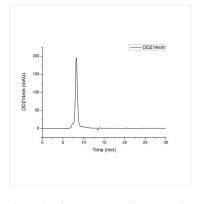
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. or This product is stable at  $\leq$  -70°C for up to 6 months from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Avoid repeated freeze/thaw cycles.

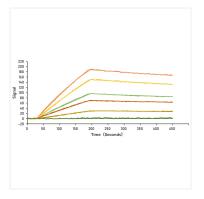
# **Validation Data**



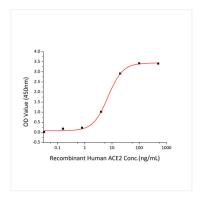
Recombinant SARS-CoV-2 Spike S1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.



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.