

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 \geq 90 % as

determined by SDS-PAGE;≥ 90 % as determined by HPLC.

Calculated MW Observed MW

76.81 kDa 110-130 kDa

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. 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.

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 μ g/mL (100 μ 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).

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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.

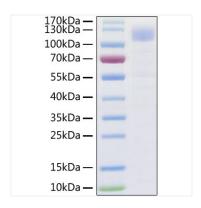
Operational Notes

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

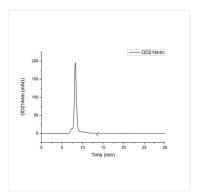
Contact

6	400-999-6126
\bowtie	cn.market@abclonal.com.cr
•	www.abclonal.com.cr

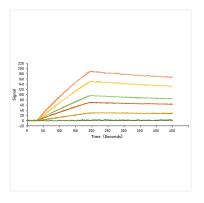
Validation Data



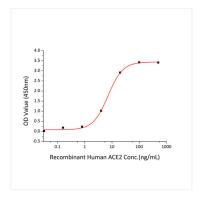
Recombinant SARS-CoV-2 Spike S1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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.