

Recombinant SARS-CoV-2 Spike S1 Protein

Catalog No.: RP01259 Recombinant 1 Publications

Sequence Information

Species Gene ID Swiss Prot SARS-CoV-2 43740568

Tags

C-hFc&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.

Calculated MW Observed MW

101.92 kDa 130-160 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.

Contact

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 (Val11-Arg682) of SARS-COV-2(2019-nCoV) Spike S1 (Accession #YP_009724390.1) fused with an Fc, $6 \times \text{His}$ tag at the C-terminus.

Bio-Activity

1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 at 2 μ g/mL (100 μ L/well) can bind Recombinant SARS-CoV-2 Spike S1, the EC₅₀ of SARS-COV-2 Spike S1 is 6.79 ng/mL.|2.Immobilized Human ACE2 on COOH Chip can bind SARS-COV-2 Spike S1 with an affinity constant of 90.8 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.

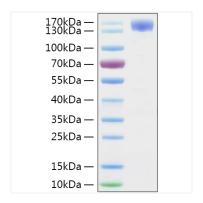
Avoid repeated freeze/thaw cycles.

Operational Notes

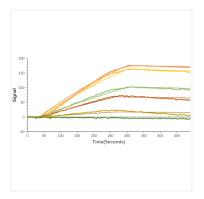
For your safety and health, please wear a lab coat and disposable gloves for handling.

2	400-999-6126
\sim	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

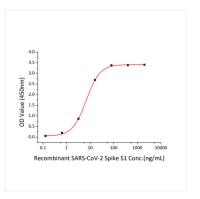
Validation Data



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



Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 90.8 nM as determined in a SPR assay (Nicoya OpenSPR).



Immobilized Recombinant Human ACE2 at 2 μ g/mL (100 μ L/well) can bind Recombinant SARS-COV-2 Spike S1,the EC $_{50}$ of SARS-COV-2 Spike S1 is 6.79 ng/mL.