

Recombinant SARS-CoV-2 Spike S1 Protein

Catalog No.: RP01259

Sequence Information

Species	Gene ID
SARS-CoV-2	43740568
Swiss Prot	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	≥ 90 % as determined by SDS-PAGE.

Calculated MW	Observed MW
101.92 kDa	130-160 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 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 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

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 this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, 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×His tag at the C-terminus.

Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 at 2 μg/mL (100 μL/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

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°C

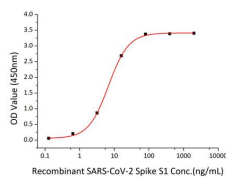
Operational Notes

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

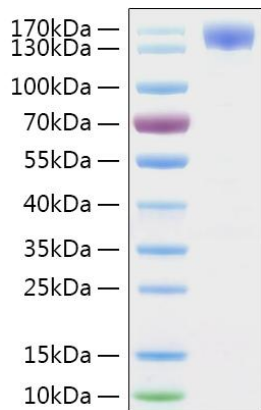
Contact

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

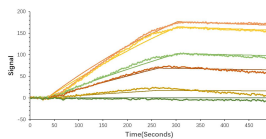
Validation Data



Immobilized Recombinant Human ACE2 at 2μg/mL (100 μL/well) can bind Recombinant SARS-COV-2 Spike S1,the EC₅₀ of SARS-COV-2 Spike S1 is 6.79 ng/mL.



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).