

# Datasheet for ABIN7520470

# SARS-CoV-2 Spike S1 Protein (mFc Tag)



#### Overview

Quantity:	100 μg
Target:	SARS-CoV-2 Spike S1
Origin:	SARS Coronavirus (SARS-CoV)
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This SARS-CoV-2 Spike S1 protein is labelled with mFc Tag.

#### **Product Details**

Purpose:	Active Recombinant SARS-CoV Spike S1 Protein
Sequence:	SDLDRCTTFD DVQAPNYTQH TSSMRGVYYP DEIFRSDTLY LTQDLFLPFY SNVTGFHTIN
	HTFGNPVIPF KDGIYFAATE KSNVVRGWVF GSTMNNKSQS VIIINNSTNV VIRACNFELC
	DNPFFAVSKP MGTQTHTMIF DNAFNCTFEY ISDAFSLDVS EKSGNFKHLR EFVFKNKDGF
	LYVYKGYQPI DVVRDLPSGF NTLKPIFKLP LGINITNFRA ILTAFSPAQD IWGTSAAAYF
	VGYLKPTTFM LKYDENGTIT DAVDCSQNPL AELKCSVKSF EIDKGIYQTS NFRVVPSGDV
	VRFPNITNLC PFGEVFNATK FPSVYAWERK KISNCVADYS VLYNSTFFST FKCYGVSATK
	LNDLCFSNVY ADSFVVKGDD VRQIAPGQTG VIADYNYKLP DDFMGCVLAW NTRNIDATST
	GNYNYKYRYL RHGKLRPFER DISNVPFSPD GKPCTPPALN CYWPLNDYGF YTTTGIGYQP
	YRVVVLSFEL LNAPATVCGP KLSTDLIKNQ CVNFNFNGLT GTGVLTPSSK RFQPFQQFGR
	DVSDFTDSVR DPKTSEILDI SPCAFGGVSV ITPGTNASSE VAVLYQDVNC TDVSTAIHAD
	QLTPAWRIYS TGNNVFQTQA GCLIGAEHVD TSYECDIPIG AGICASYHTV SLLR
Specificity:	Ser14-Arg667

#### **Product Details**

Purity:	> 90 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 1.0 EU/µg of the protein by LAL method.
Biological Activity Comment:	Measured by its binding ability in a functional ELISA. Immobilized at Human ACE2 $2\mu g/mL$ (100 $\mu L/well$ ) can bind SARS-CoV Spike S1 with a linear range of 0.05-36.67 ng/mL.

## Target Details

Target:	SARS-CoV-2 Spike S1
Alternative Name:	SARS-CoV Spike S1 (SARS-CoV-2 Spike S1 Products)
Target Type:	Viral Protein
Background:	Description: The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion, Defines the range of the hosts and specificity of the virus, Main component to bind with the neutralizing antibody, Key target for vaccine design, Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.  Name: Spike,Spike RBD,Spike S1
Gene ID:	1489668
UniProt:	P59594

## **Application Details**

Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
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 %

### Handling

	Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Buffer:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	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.