

For Research Use Only

# SARS-CoV-2 S protein (319-541 aa) Polyclonal antibody



Catalog Number: 28991-1-AP

## Basic Information

<b>Catalog Number:</b> 28991-1-AP	<b>GenBank Accession Number:</b> NC_045512	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 300 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 43740568	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Source:</b> Rabbit	<b>Full Name:</b> SARS-CoV-2 Spike Protein	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 141 kDa	
<b>Immunogen Catalog Number:</b> AG30689		

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : Recombinant protein,
<b>Species Specificity:</b> Virus	

## Background Information

Coronaviruses (CoVs) infect human and animals and cause varieties of diseases, including respiratory, enteric, renal, and neurological diseases. CoV uses its spike protein to recognize ACE2 as its receptors and mediate membrane fusion and virus entry into host cells (PMID: 32221306). Each monomer of trimeric S protein is about 180 kDa, and contains two subunits, S1 and S2, S1 recognizes and binds to host receptors, and subsequent conformational changes in S2 facilitate fusion between the viral envelope and the host cell membrane (PMID: 19198616). Although the amino acid sequences of the S-glycoprotein were found to be different between the various HCoV, the structures showed high similarity, but the best 3D structural overlap shared by SARS-CoV and SARS-CoV-2, consistent with the shared ACE2 predicted receptor (PMID: 32522207). The spike protein of CoVs can be a target for vaccine and therapeutic development (PMID: 19198616). 28991-1-AP is specific for spike protein of SARS-COV-2, that antigen region is 319-541aa.

## Storage

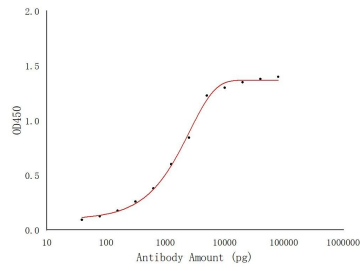
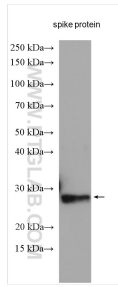
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



E.coli expressed SARS-CoV-2 spike protein (Cat.NO. Ag30688) was subjected to SDS PAGE followed by western blot with 28991-1-AP (SARS-CoV-2 S protein (319-541 aa) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.

SARS-CoV-2 Spike Glycoprotein Antibody (28991-1-AP) tested by ELISA. SARS-CoV-2 Spike Glycoprotein (319-541 aa) were coated onto microtiter plates at 0.15 µg/well and then incubated with a dilution series of SARS-CoV-2 Spike Glycoprotein Antibody (28991-1-AP). Bound antibodies were detected with HRP conjugated Goat anti-Rabbit IgG followed by incubation with HRP Substrate and terminated with H<sub>2</sub>SO<sub>4</sub>, then measuring the resulting absorbance at 450 nm.

