

For Research Use Only

SARS-CoV-2 S protein (RBD, 319-541 aa) Monoclonal antibody

Catalog Number: 67758-1-Ig **13 Publications**



Basic Information

Catalog Number: 67758-1-Ig	GenBank Accession Number: NC_045512	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 43740568	CloneNo.: 1H3E9
Source: Mouse	Full Name: SARS-CoV-2 Spike Protein	Recommended Dilutions: WB 1:5000-1:50000
Isotype: IgG1	Calculated MW: 141 kDa	
Immunogen Catalog Number: AG30688		

Applications

Tested Applications: WB, ELISA, Neutralization	Positive Controls: WB : Ag30688,
Cited Applications: WB	
Species Specificity: Virus	
Cited Species: human, mouse	

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).

Lyophilized format of this product is available.

Notable Publications

Author	Pubmed ID	Journal	Application
Shugang Qin	36647424	Acta Pharm Sin B	WB
Na Fan	36563159	Sci Adv	WB
Nian-Dong Mao	39581172	Bioorg Chem	WB

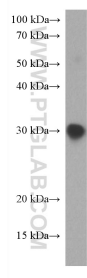
Storage

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

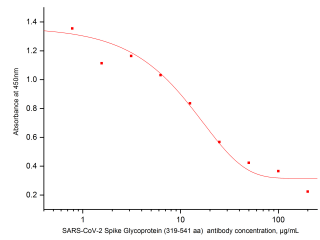
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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Selected Validation Data



Recombinant spike protein (RBD domain) were subjected to SDS PAGE followed by western blot with 67758-1-Ig (SARS-CoV-2 Spike Glycoprotein (319-541 aa) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Surrogate virus neutralization test of SARS-CoV-2 Spike Glycoprotein (319-541 aa) monoclonal antibody 67758-1-Ig using commercial kit. Briefly, RBD protein has been pre-coated on microplate, HRP labeled ACE2 protein and serial dose of 67758-1-Ig are added to the plate simultaneously and incubated for 1 hour at 37°C. The plate was then washed and signal was developed by adding chromogenic substrate followed by stop buffer. Signal strength was monitored at

