For Research Use Only

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



Catalog Number: 67758-1-PBS

Basic Information

Catalog Number: GenBank Accession Number: 67758-1-PBS NC_045512

 Size:
 GeneID (NCBI):

 1 mg/ml
 43740568

 Source:
 Full Name:

Mouse SARS-CoV-2 Spike Protein

Isotype: Calculated MW:
IgG1 141 kDa

Immunogen Catalog Number:

AG30688

Protein A purification CloneNo.: 1H3E9

Purification Method:

Applications

Tested Applications:

 $WB, Neutralization, Indirect\ ELISA$

Species Specificity:

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).

Lyophilized format of this product is available.

Storage

Storage

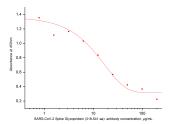
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

Selected Validation Data



Recombinant spike protein (RBD domain) were subjected to SDS PAGE followed by western blot with 67758-1-lg (SARS-CoV-2 Spike Glycoprotein (319-541 aa) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67758-1-PBS in a different storage buffer formulation.



Surrogate virus neutralization test of SARS-CoV-2 Spike Glycoprotein (319-541 aa) monoclonal antibody 67758-1-lg using commercial kit. Briefly, RBD protein has been pre-coated on microplate, HRP labeled ACE2 protein and serial dose of 67758-1-lg 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