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SARS-CoV-2 Spike Monoclonal Antibody

(Catalog # A73664)

Background
The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. 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 the basic elements needed for membrane fusion. The S protein plays a key part in the induction of neutralizing antibody and T-cell responses, as well as protective immunity. The main functions of the Spike protein are summarized as follows: Mediate receptor binding and membrane fusion; Define 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.

Description
SARS-CoV-2 Spike Monoclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation
Buffer: PBS with 0.05% proclin300, pH7.3

Specificity
2019-nCoV

Isotype
IgG

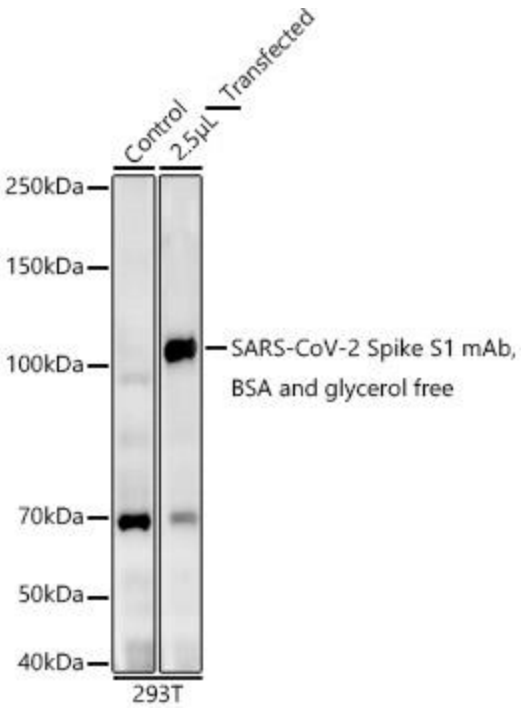
Purification
Affinity Purification

Immunogen
Recombinant fusion protein of SARS-COV-2 CoV spike.

Storage
Shipped at 4°C. Store at 4℃. Avoid freeze / thaw cycles.

Alternative Names
Anti-coronavirus spike Antibody, Anti-cov spike Antibody, Anti-ncov RBD Antibody, Anti-ncov s1 Antibody, Anti-ncov s2 Antibody, Anti-ncov spike Antibody, Anti-NCP-CoV RBD Antibody, Anti-NCP-CoV s1 Antibody, Anti-NCP-CoV s2 Antibody, Anti-NCP-CoV Spike Antibody, Anti-novel coronavirus RBD Antibody, Anti-novel coronavirus s1 Antibody, Anti-novel coronavirus s2 Antibody, Anti-novel coronavirus spike Antibody, Anti-RBD Antibody, Anti-S1 Antibody, Anti-S2 Antibody, Anti-Spike RBD Antibody

Application
WB IF/ICC IP FC ELISA; Recommended dilution: ELISA 1:1000 - 1:5000, WB 1:2000 - 1:10000, FC 1:50 - 1:200, IF/ICC 1:50 - 1:200, IP 1:50 - 1:200



Western blot analysis of extracts from control 293T and SARS-CoV-2 Spike S1-293T transfected cells, using SARS-CoV-2 Spike Monoclonal Antibody at 1:10000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.

