

Anti-SARS-CoV-2 Spike S1 Antibody

rev 05/20

CATALOG NO.: A3000-50 (50 µg)

BACKGROUND DESCRIPTION: Coronaviruses (CoV) are a large group of enveloped positive-sense RNA viruses. They belong to subfamily *Coronavirinae*, in the family of *Coronaviridae*, of the order of *Nidovirales*. The Coronavirus genome is about 30 kb in length and encodes four structural proteins, namely, spike (S), envelope (E), membrane (M) and nucleocapsid (N), multiple nonstructural proteins and other accessory proteins. The Spike (S) protein is a 180 kDa type I glycosylated transmembrane protein, that assembles as a trimer on the surface of the virus, hence the coronavirus appears crown-shaped (In Latin, corona means crown). The ectodomain of the Spike protein consists of two domains: S1 domain whose main function is receptor binding, and S2 domain whose main function is membrane fusion. S1 binds to the cell surface receptor of host for attachment during the viral entry, this induces conformational change in the S2, thus enabling the fusion of host and viral membranes and ultimately entry of the viral genome in the host cell.

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: CHO-expressed full length S1 with human IgG Fc fusion

PURIFICATION: Protein A purified

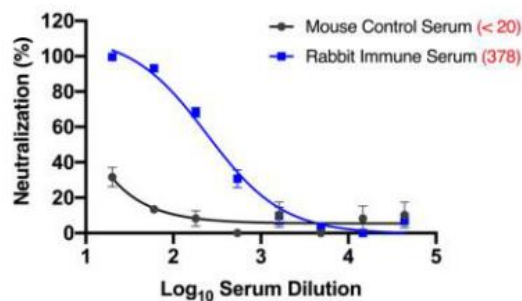
FORM: Liquid

FORMULATION: 0.01 M Tris-HCl, pH 8.0, 0.15 M NaCl, 0.02% sodium azide

STORAGE CONDITIONS: Store at -20°C. Product is stable for 6 weeks at 2 - 8°C as undiluted liquid. Prepare fresh dilutions for every new experiment. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: Indirect ELISA (0.05 - 1 µg/ml), Sandwich ELISA (0.25 - 1 µg/ml) as coating antibody with Anti-SARS-CoV-2 Spike S1 antibody (Clone 4C6) (Catalog# A3001), Virus Neutralizing Assay (titer at 20 µg/ml)

This information is only intended as a guide. The optimal dilutions must be determined by the user



Virus neutralization assay performed using Anti-SARS-CoV-2 Spike S1 antibody. Serial dilutions of Rabbit serum were mixed with virus loading particles of SARS-CoV-2 Spike protein and added to the wells containing HEK293T cells over-expressing ACE2. After incubation, viral infection was visualized under a microscope. Mouse serum was used as negative control in this assay.

RELATED PRODUCTS:

Anti-MERS-CoV S1 Mouse IgG1 Antibody (A2065)
 Anti-CoV-2 & SARS-CoV NP Mouse IgG1 Antibody (A2066)
 Anti-SARS-CoV-2 Spike S1 antibody (Clone# 4C6) (A3001)
 Anti-SARS-CoV-2 NP Antibody (Clone# 6F10) (A2060)
 Anti-SARS-CoV-2 NP Antibody (A2061)

FOR RESEARCH USE ONLY! Not to be used on humans.