

Anti-CoV-2 & SARS-CoV S1 Antibody (Clone# CR3022)

rev 05/20

CATALOG NO.: A2103-200 (200 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.

ALTERNATE NAMES: Spike protein; COVID19; COVID 19; S protein; SARS-CoV S protein; S glycoprotein; E2; Peplomer protein; Spike protein S1; SARS Coronavirus; SARS-CoV-2; SARS CoV 2; 2019-nCoV

ANTIBODY TYPE: Monoclonal

CLONE: CR3022

HOST/ISOTYPE: Recombinant / Human IgG1, kappa

IMMUNOGEN: This antibody binds 300-500 aa in the S1 domain of the SARS-CoV as well as SARS-CoV-2 Spike protein. The binding epitope is only accessible in the "open" conformation of the spike protein

PURIFICATION: Protein A affinity purified

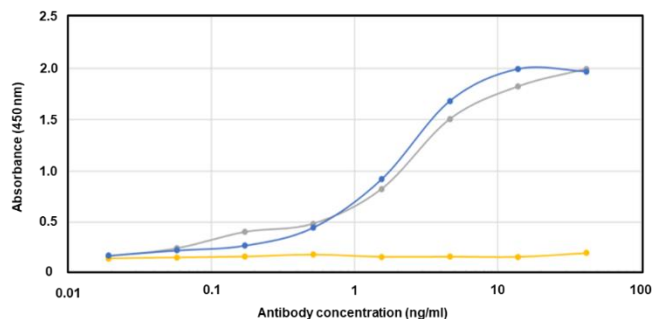
FORM: Liquid

FORMULATION: In PBS with 0.02% Proclin 300

STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: ELISA

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



Indirect ELISA shows that Anti-CoV-2 & SARS-CoV S1 antibody (Clone# CR3022) can bind to immobilized recombinant SARS-CoV-2 Spike S1 protein (His-Tag, expressed in insect cells) and recombinant SARS-CoV Spike S1 protein (His-Tag, expressed in HEK293 cells) at a concentration of 5 µg/ml. HRP-labelled anti-human IgG antibody was used for detection at a dilution of 1:4000. Recombinant SARS-CoV-2 Spike S2 protein (His-Tag, expressed in insect cells) was used as control.

RELATED PRODUCTS:

Anti-SARS-CoV-2 NP Antibody (A2061)
 Anti-SARS-CoV-2 Spike S1 Antibody (A3000)
 Anti-SARS-CoV-2 Spike S1 Antibody (Clone# 4C6) (A3001)
 Anti-SARS-CoV-2 NP Antibody (Clone# 6F10) (A2060)