

# Anti-SARS-CoV-2 S1 Antibody (Clone# S309)

12/20

CATALOG NO.: A2266-100 (100 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: the S1 domain whose main function is receptor binding, and the S2 domain whose main function is membrane fusion. S1 binds to the cell surface receptor of the host for attachment during the viral entry, this induces a 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, S309

**ANTIBODY TYPE:** Monoclonal

**CLONE:** S309

**HOST/ISOTYPE:** Recombinant / Human IgG1

**IMMUNOGEN:** Recombinant SARS-CoV-2 RBD protein

**FORM:** Liquid

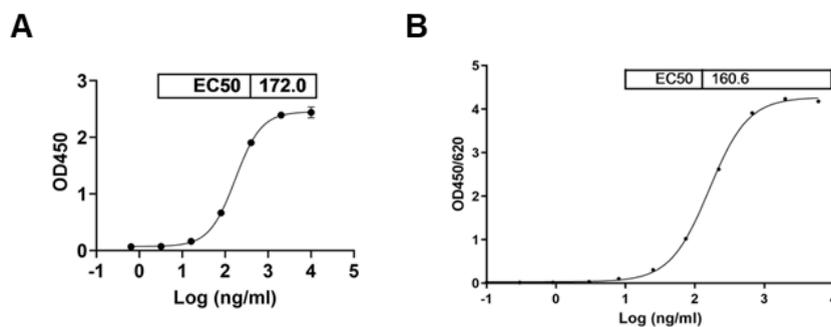
**FORMULATION:** In PBS, pH 7.5

**SPECIES REACTIVITY:** Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), SARS-CoV

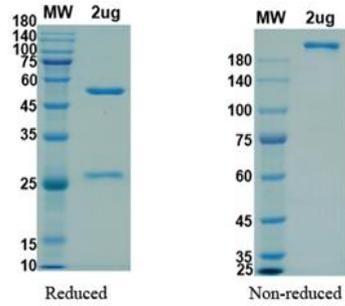
**STORAGE CONDITIONS:** Store at -20 to -80°C. Avoid repeated freeze/thaw cycles

**APPLICATIONS AND USAGE:** ELISA 1:5000-1:10,000

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



Direct ELISA shows that Anti-SARS-CoV-2 S1 Antibody (Clone# S309) can bind to immobilized Spike protein (A) (EC50 = 172 ng/ml) and RBD (B) (EC50 = 160.6 ng/ml)



SDS-PAGE analysis was performed to assess the purity and integrity of Anti-SARS-CoV-2 S1 Antibody (Clone# S309)

**RELATED PRODUCTS:**

- Anti-IL-17 $\alpha$  (Secukinumab), Human IgG1 Antibody (A2154)
- Anti-SARS-CoV-2 NP Antibody (Clone# 11D5) (A2092)
- Anti-CD6 (Itolizumab), Humanized Antibody (A2164)
- Anti-CoV-2 & SARS-CoV NP Mouse IgG2b Antibody (A2064)

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