

🕜 Tel: +1-301-363-4651 🛛 🖂 Email: cusabio@cusabio.com 🥃 Website: www.cusabio.com 🧉

## S Antibody

Product Code	CSB-RA33245A0GMY
Abbreviation	S
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P0DTC2
Immunogen	Recombinant Human Novel Coronavirus Spike glycoprotein (S) (16-685aa) (CSB-MP3324GMY)
Species Reactivity	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Tested Applications	ELISA, GICA; Recommended dilution: ELISA:1:10000-1:50000, GICA:1:500-1:25000
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
<b>Purification Method</b>	Affinity-chromatography
Isotype	Monoclonal mouse (varialbe region) / human (kappa / IgG1 constant)chimeric antibody
Clonality	Monoclonal
Alias	S, S1, S1-RBD, Spike glycoprotein
Immunogen Species	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Research Area	Microbiology
Gene Names	S (Spike glycoprotein)
Accession NO.	H6

Image



The Binding Activity of SARS-CoV-2-S Antibody with SARS-CoV-2-S1-RBD Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD (CSB-MP3324GMY1b1) at 2  $\mu$ g/ml can bind SARS-CoV-2-S Antibody, the EC<sub>50</sub> is 15.29 ng/ml.



The Binding Activity of SARS-CoV-2-S Antibody with SARS-CoV-2-S1-RBD Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD (CSB-YP3324GMY1) at 2  $\mu$ g/ml can bind SARS-CoV-2-S Antibody, the EC<sub>50</sub> is 16.49 ng/ml.

1



🕜 Tel: +1-301-363-4651 🛛 🗷 Email: cusabio@cusabio.com 🥥 Website: www.cusabio.com 🌘



In the Colloidal Gold Immunochromatography Assay detection system, the background of antibody (CSB-RA33245A0GMY) is clean, the detection limit can be as low as 13.94ng/ml (0.976ng/0.07ml), and the sensitivity is very good.



ELISA: Immobilize various types of SARS proteins at concentration of 2µg/ml on solid substrate, then react with SARS-CoV-2-S Antibody at concentration of 100µg/ml, 10µg/ml and 1µg/ml. It shows the SARS-CoV-2-S Antibody (CSB-RA33245A0GMY) is specific for SARS-CoV-2-S1-RBD protein, without any cross-reactivity with HCoV-OC43, HCoV-229E.

## Description

The recombinant S antibody was prepared by obtaining the antibody genes, cloning the genes into a plasma vector to construct vector clone, transfecting the vector clone into a mammalian cell line for transient expression, and purifying the antibody by affinity-chromatography. This recombinant S antibody has been verified to detect the S protein from Human Novel Coronavirus (SARS-CoV-2/2019-nCoV) in the ELISA, GICA.

SARS-CoV-2 S protein consists of two subunits S1 and S2. It is involved in receptor recognition, viral attachment, fusion, and entry into host cells. The S1 subunit contains a receptor-binding domain (RBD) responsible for the recognization and binding of the host receptor ACE2. The S2 subunit participates in the fusion of the viral envelope and host cell membrane. The S protein's central function in viral infection suggests that it could be a target for vaccines, antibody-blocking treatment, and small chemical inhibitors.