

Anti-S Antibody (9P501)

Product Details

Ig Type:	Mouse scFv fusion with human IgG1 Fc
Reactivity:	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Conjugation:	Unconjugated
Clone:	9P501
Purification:	Affinity-chromatography

Applications

1. The Binding Activity of SARS-CoV-2-S Antibody with SARS-CoV-2-S Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S at 2 µg/ml can bind SARS-CoV-2-S Antibody, the EC50 is 42.83 ng/ml.
2. 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 at 2 µg/ml can bind SARS-CoV-2-S Antibody, the EC50 is 29.51 ng/ml.
3. In the Colloidal Gold Immunochromatography Assay detection system, the background of antibody (TMAH-01061) is clean, the detection limit can be as low as 223.2ng/ml (15.625ng/0.07ml), and the sensitivity is very good.
4. Binding signal of SARS-CoV-2-S1-RBD and ACE2 protein-HRP conjugate was inhibited by S Antibody (TMAH-01061) with the IC50 is 23.32 nM.
5. Binding signal of SARS-CoV-2-S1-RBD and ACE2 protein-HRP conjugate was inhibited by S Antibody (TMAH-01061) with the IC50 is 2.38 µg/ml.
6. 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 (TMAH-01061) is specific for SARS-CoV-2-S1-RBD protein, without any cross-reactivity with MERS-CoV, SARS-CoV, HCoV-OC43 or HCoV-229E.
7. The Binding Activity of S protein with S Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized S at 2 µg/ml can bind S Recombinant Antibody, the EC50 of S Recombinant Antibody.
8. The Binding Activity of S protein with S Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized S at 2 µg/ml can bind S Recombinant Antibody, the EC50 of S Recombinant Antibody.
9. The Binding Activity of S protein with S Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized S at 2 µg/ml can bind S Recombinant Antibody, the EC50 of S Recombinant Antibody.
- The Binding Activity of S protein with S Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized S at 2 µg/ml can bind S.
10. The Binding Activity of S protein with S Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized S at 2 µg/ml can bind S Recombinant Antibody, the EC50 of S Recombinant Antibody.

Verified Activity:

A DRUG SCREENING EXPERT

Application: ELISA,GICA

Recommended ELISA:1:10000-1:50000; GICA:1:500-1:5000; Neutralising:1:50-1:10000.

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: Human Novel Coronavirus Spike glycoProtein (S) (16-685aa)

Antigen Species: Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)

Uniprot ID: P0DTC2

Synonyms: Spike glycoprotein;Peplomer protein;S glycoprotein;E2

Biology Area: Microbiology

Research Background

attaches the virion to the cell membrane by interacting with host receptor, initiating the infection. Binding to human ACE2 receptor and internalization of the virus into the endosomes of the host cell induces conformational changes in the Spike glycoprotein. Binding to host NRP1 and NRP2 via C-terminal polybasic sequence enhances virion entry into host cell. This interaction may explain virus tropism of human olfactory epithelium cells, which express high level of NRP1 and NRP2 but low level of ACE2. The stalk domain of S contains three hinges, giving the head unexpected orientational freedom. Uses human TMPRSS2 for priming in human lung cells which is an essential step for viral entry. Can be alternatively processed by host furin. Proteolysis by cathepsin CTSL may unmask the fusion peptide of S2 and activate membranes fusion within endosomes. mediates fusion of the virion and cellular membranes by acting as a class I viral fusion protein. Under the current model, the protein has at least three conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. Acts as a viral fusion peptide which is unmasked following S2 cleavage occurring upon virus endocytosis. May down-regulate host tetherin (BST2) by lysosomal degradation, thereby counteracting its antiviral activity.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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