

Description

Anti-SARS-CoV-2 Neutralizing Antibody, Human IgG1 (SAD-S35) is isolated from a SARS-CoV-2 infected patient and is recombinantly produced from human 293 cells (HEK293). This antibody recognizes the SARS-CoV-2 Spike Protein RBD domain and inhibits the interaction between SARS-CoV-2 RBD and ACE2 with an IC₅₀ of 1.47 µg/mL using SARS-CoV-2 Inhibitor Screening Kit (Cat. No. EP-105). Pseudovirus assay shows that this antibody has potent neutralizing activity against pseudovirus bearing SARS-CoV-2 Spike protein.

Isotype

Human IgG1/kappa

Specificity

This product is a specific neutralizing antibody against SARS-CoV-2 Spike Protein RBD domain and no cross-reactivity was detected against SARS-CoV Spike protein. The cross-reactivity with other coronaviruses has not been tested yet.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 . Normally trehalose is added as protectant before lyophilization.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

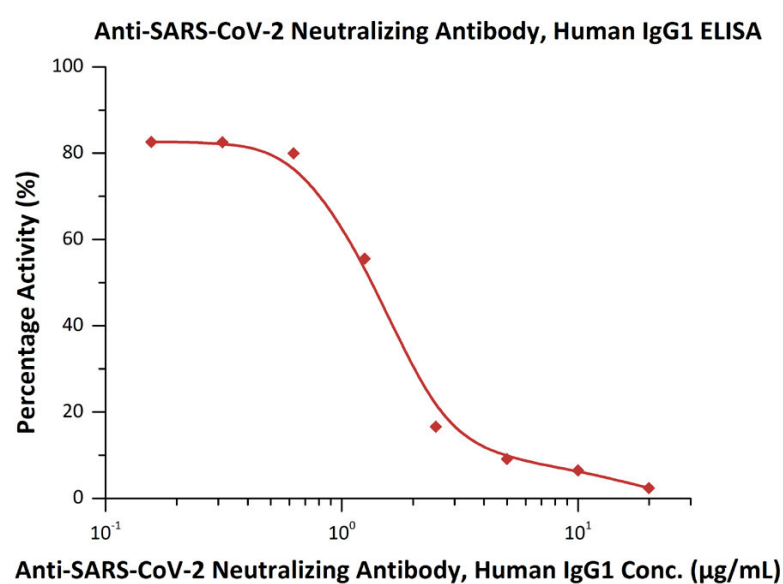
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

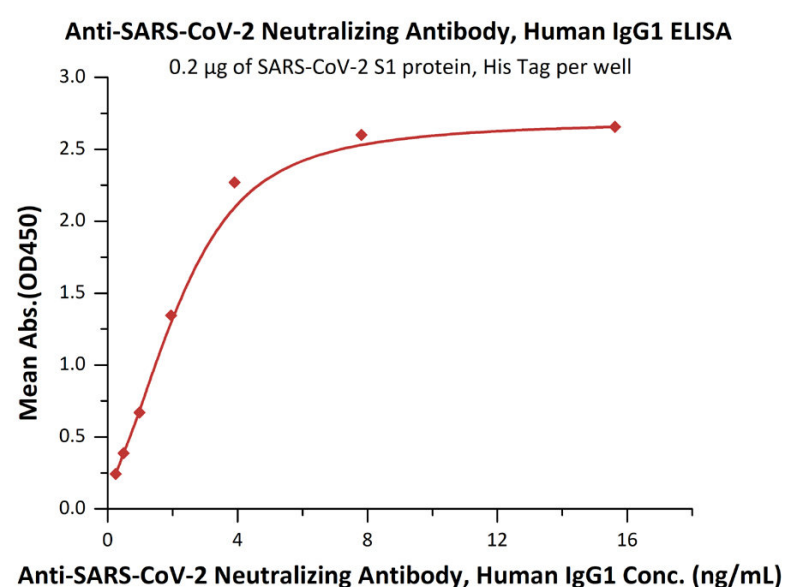
This product is stable after storage at:

- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 years under sterile conditions after reconstitution.

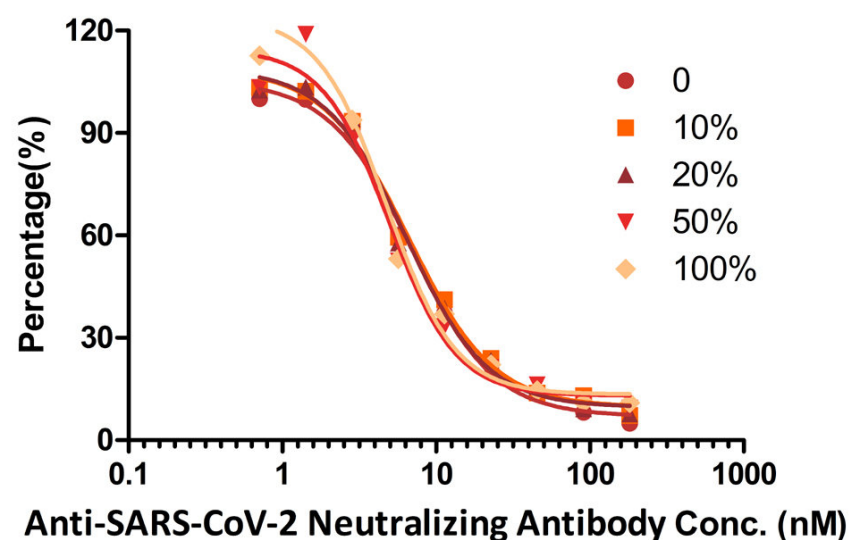
Bioactivity-ELISA



Serial dilutions of Anti-SARS-CoV-2 Neutralizing Antibody, Human IgG1 (Cat.No. SAD-S35) was detected by SARS-CoV-2 Inhibitor screening Kit (Cat.No. EP-105) with a half maximal inhibitory concentration (IC₅₀) of 1.472 µg/mL (QC tested).



Immobilized SARS-CoV-2 S1 protein, His Tag (Cat. No. S1N-C52H4) at 2 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 Neutralizing Antibody, Human IgG1 (Cat. No. SAD-S35) with a linear range of 0.2-1.95 ng/mL (QC tested).



Determination of Anti-SARS-CoV-2 Neutralizing Antibody titer in different concentrations of human serum.

Neutralizing titer of Anti-SARS-CoV-2 Neutralizing Antibody, Human IgG1 (Cat. No. SAD-S35) measured by Anti-SARS-CoV-2 neutralizing antibody titer serologic assay kit (Cat. No. TAS-K003) in different concentrations of human serum (CV < 30%) (Routinely tested).

Background

It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Please contact us via info@amsbio.com if you have any question on this product.