Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) (MALS verified)

Catalog # SPD-M162

Source

Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) is isolated from a SARS-CoV-2 infected patient and is recombinantly produced from human 293 cells (HEK293).

Clone

AM122

Isotype

Human IgM | Human Kappa

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Specificity

This product is a specific antibody against SARS-CoV-2 Spike protein RBD domain. No cross-reactivity is detected with Spike protein RBD domain of other coronaviruses, including SARS-CoV, MERS-CoV, HCoV-229E, HCoV-NL63, HCoV-OC43 and HCoV-HKU1.

Application

Application	Recommended Usage
ELISA	0.6-20 ng/mL

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Purification

Protein A purified / Protein G purified

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 .

Contact us for customized product form or formulation.

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

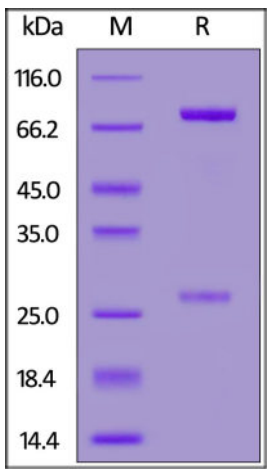
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

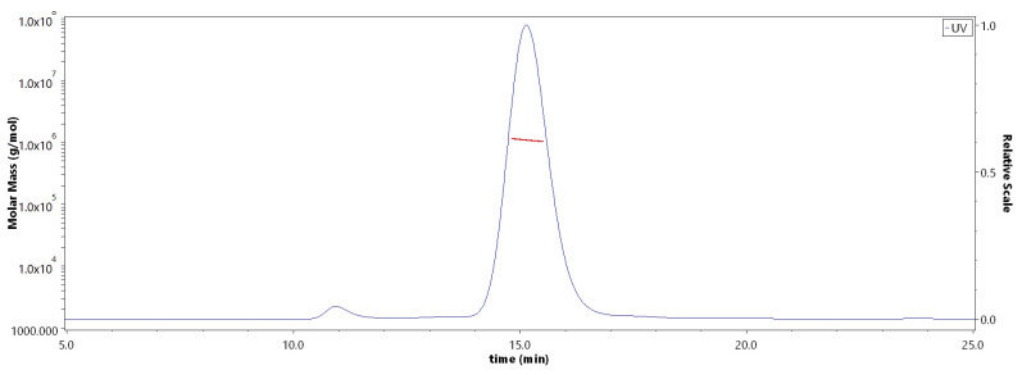
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



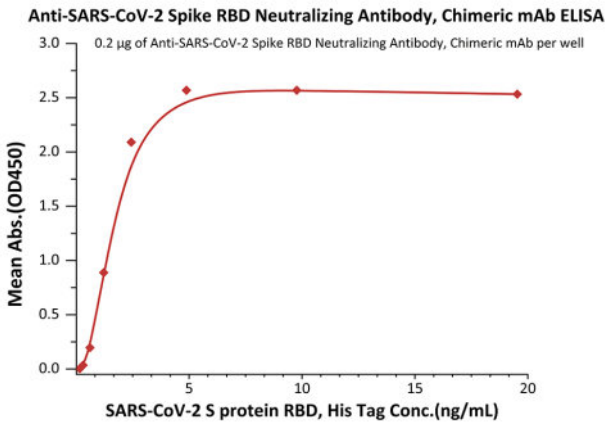
Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

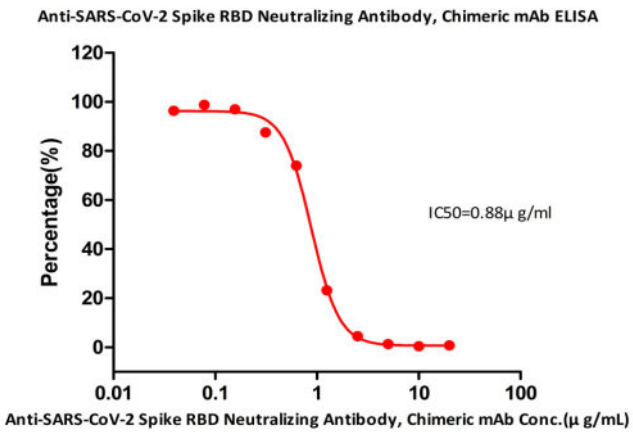


The purity of Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) (Cat. No. SPD-M162) is more than 90% and the molecular weight of this protein is around 980-1200 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) (Cat. No. SPD-M162) at 2 μg/mL (100 μL/well) can bind SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) with a linear range of 0.6-2.4 ng/mL (QC tested).



Serial dilutions of Anti-SARS-CoV-2 Spike RBD Neutralizing Antibody, Chimeric mAb, Human IgM (AM122) (Cat. No. SPD-M162) was detected by Biotinylated Human ACE2, His,Avitag (Cat. No. AC2-H82E6) with a half maximal inhibitory concentration (IC50) of 0.88 μg/mL (Routinely tested).

Background

It's been reported that Coronavirus 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.

Clinical and Translational Updates