Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (MALS verified)

Catalog # S1N-M13L3

Source

Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) is a chimeric monoclonal antibody recombinantly expressed from HEK293 cells, which combines the variable region of a mouse monoclonal antibody with human IgG1 constant domain. The mouse monoclonal antibody was obtained from a mouse immunized with recombinant SARS-CoV-2 S1 protein. This chimeric antibody is purified by Protein A affinity chromatography.

Clone

AM130

Isotype

Human IgG1 | Human Kappa

Conjugate

Biotin

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Specificity

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

Application

Application	Recommended Usage
ELISA	0.1-200 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 with trehalose as protectant.

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

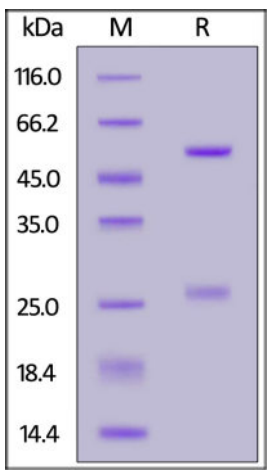
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

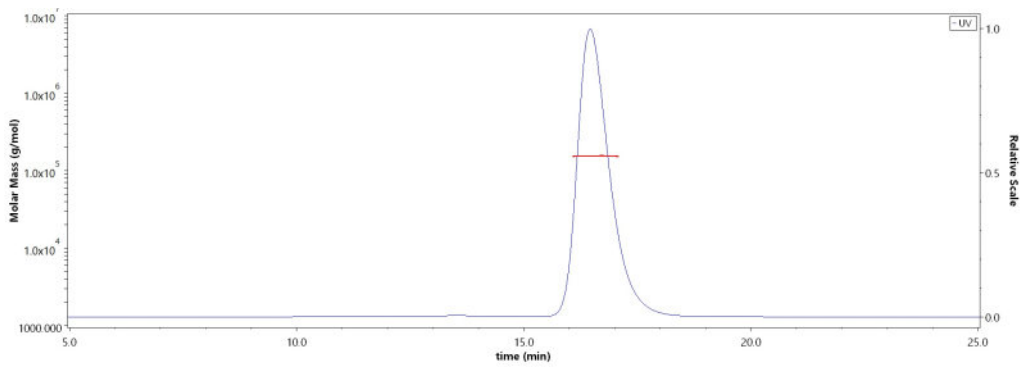
This product is stable after storage at:

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

SDS-PAGE



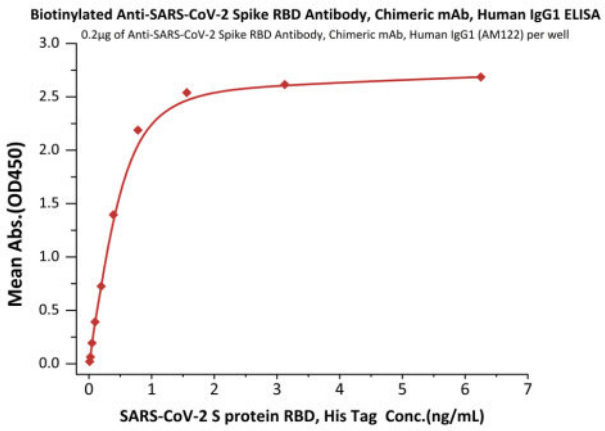
SEC-MALS



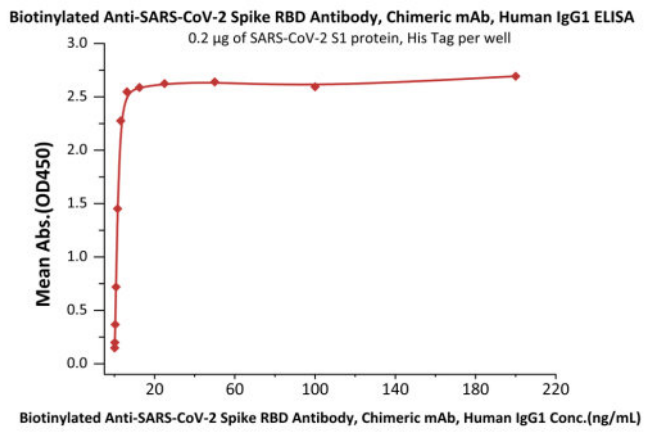
Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

The purity of Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (Cat. No. S1N-M13L3) is more than 90% and the molecular weight of this protein is around 145-160 kDa verified by SEC-MALS.
Report

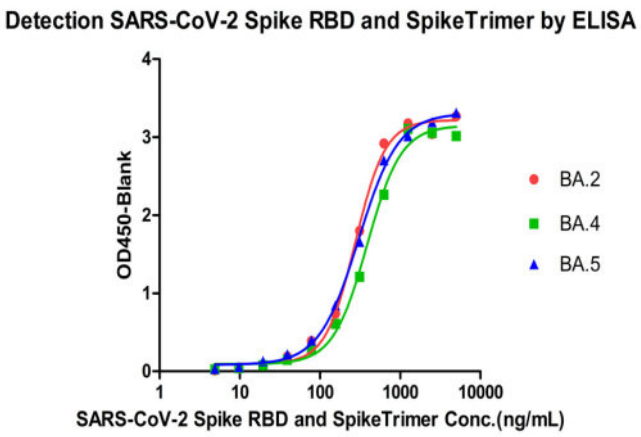
Bioactivity-ELISA



Immobilized Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM122) (Cat. No.S1N-M12A1) at 2 μg/mL, add increasing concentrations of SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) and then add Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (Cat. No.S1N-M13L3) at 0.2 μg/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 0.05 ng/mL (QC tested).



Immobilized SARS-CoV-2 S1 protein, His Tag (Cat. No. S1N-C52H2) at 2 μg/mL (100 μL/well) can bind Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (Cat. No.S1N-M13L3) with a linear range of 0.195-15.6 ng/mL (Routinely tested).



Immobilized Anti-SARS-CoV-2 Spike RBD Broadly Neutralizing Antibody, Human IgG1 (AM359b) (MALS verified)(Cat. No. SPD-M265) at 2 μg/mL, add increasing concentrations of SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) (MALS verified)(Cat. No. SPD-C522g) and SARS-CoV-2 Spike Trimer, His Tag (BA.4/Omicron) (MALS verified)(Cat. No. SPN-C5229) and SARS-CoV-2 Spike Trimer, His Tag (BA.5/Omicron) (MALS verified)(Cat. No. SPN-C522e), and then add Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (MALS verified) (Cat. No. S1N-M13L3) at 0.5 μg/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 19.53 ng/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