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

Catalog # SPD-BM227

Source

The Mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with Spike RBD $F(ab')_2$.

Clone

AM130

Isotype

Human IgG1 | Human Kappa

Conjugate

Biotin

Reactivity

Virus

Specificity

This product can recognize SARS-CoV-2 and SARS-CoV Spike Protein RBD domain. No cross-reactivity is detected with Spike Protein RBD domain of other coronaviruses, including MERS-CoV, HCoV-229E, HCoV-NL63, HCoV-OC43 and HCoV-HKU1.

Application

Application	Recommended Usage
ELISA	1.6-1000 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, pH7.3 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

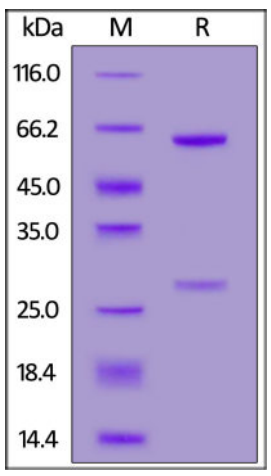
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

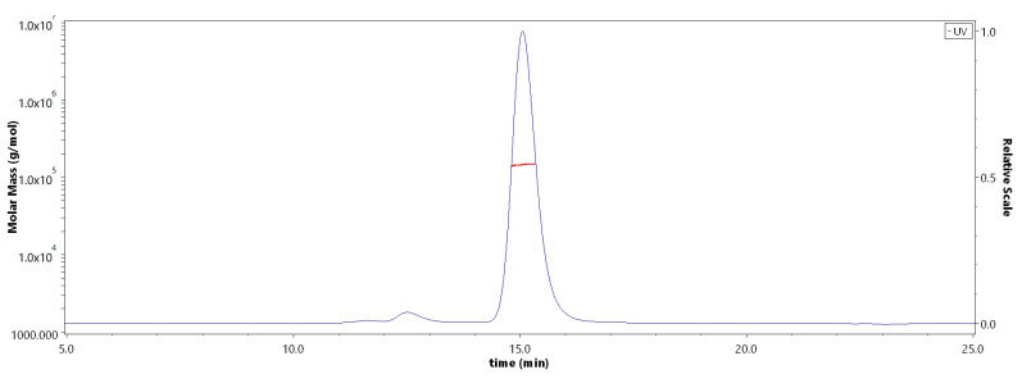
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



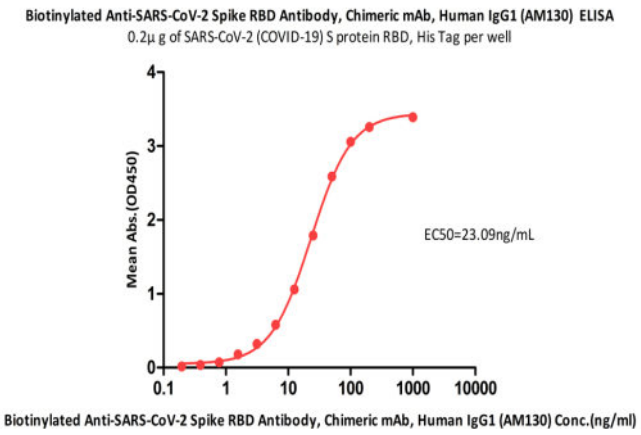
Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (AM130) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (AM130) (Cat. No. SPD-BM227) is more than 90% and the molecular weight of this protein is around 145-155 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized SARS-CoV-2 S protein RBD, His Tag(Cat. No. SPD-C52H3) at 2 μg/mL (100 μL/well) can bind Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) (Cat. No. SPD-BM227) with a linear range of 0.195-25ng/mL (QC 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