Source

Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) is isolated from a Spike RBD infected Mouse and is recombinantly produced from human 293 cells (HEK293)

Isotype

Human IgG1/kappa

Specificity

This product is a specific antibody specifically reacts with 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.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

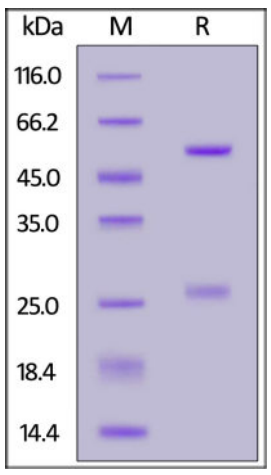
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

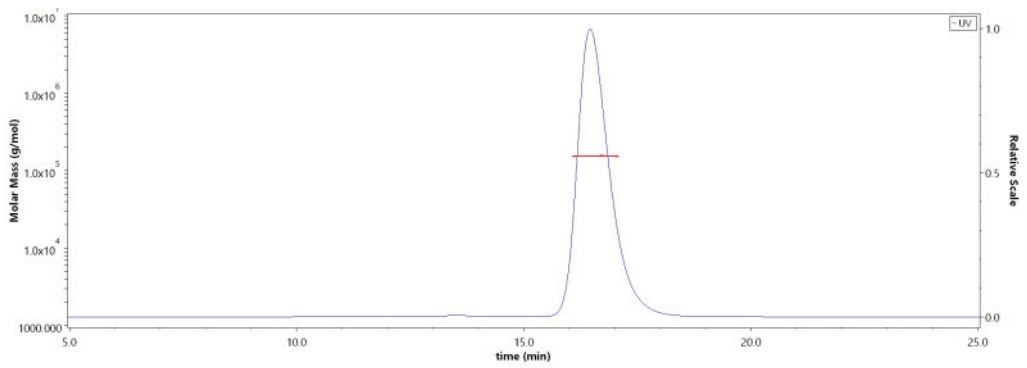
- -20 to -70°C for 12 months in lyophilized state from date of receipt;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



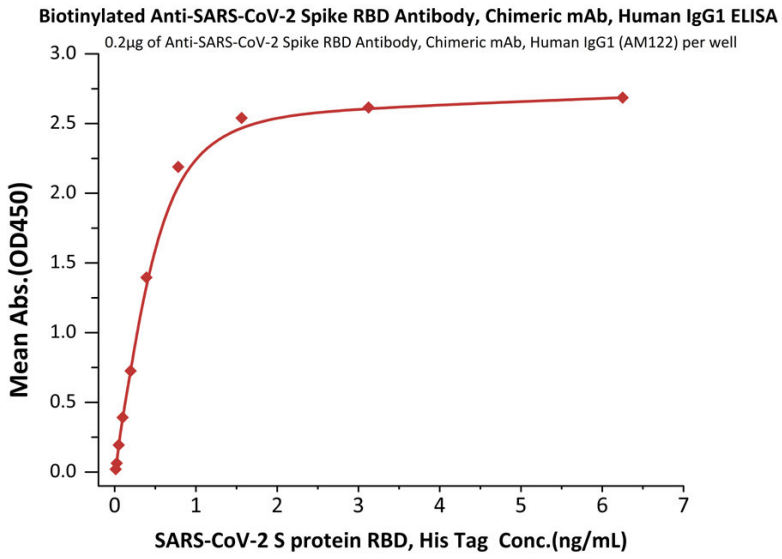
Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

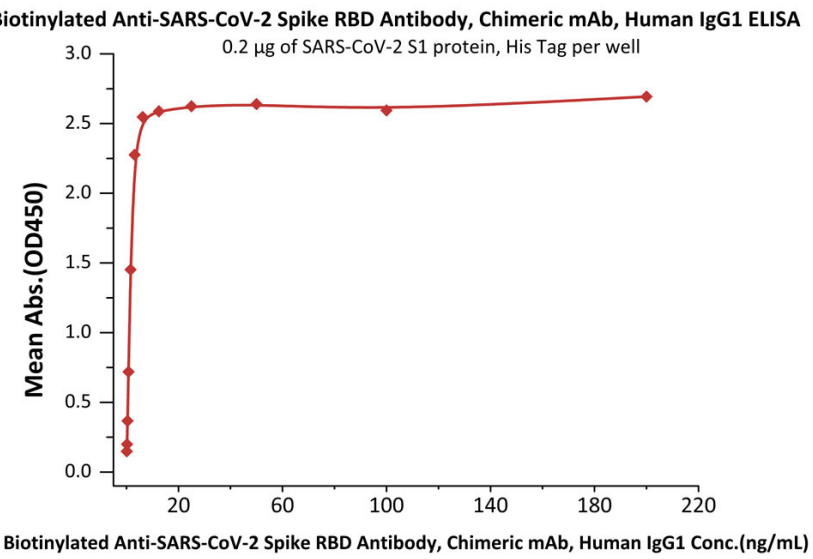


The purity of Biotinylated Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (AM130)(Cat. No. S1N-M13L3) is more than 90% and the molecular weight of this protein is around 145-160 kDa verified by SEC-MALS.
Report

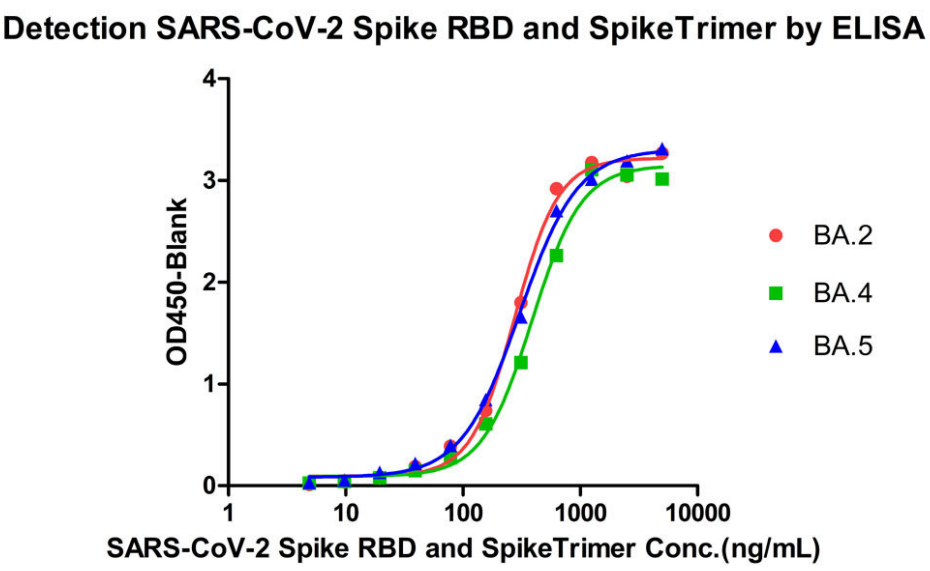
Bioactivity-Elisa



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

Its 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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.