Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (AS58) (Trehalose free)

Catalog # S1N-S58

Source

Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (AS58) (S1N-S58), originally from mouse immunized with recombinant SARS-CoV-2 Spike S1 protein, is produced from hybridoma.

Isotype

Mouse IgG1/kappa

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

This antibody can be paired with other Anti-SARS-CoV-2 Spike S1 antibodies to detect SARS-CoV-2 Spike S1 protein in sandwich ELISA or LFA assay.

Purity

>95% as determined by SDS-PAGE.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

Supplied as 0.2 μm filtered solution in PBS, pH7.4 .

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with blue ice, please inquire the shipping cost.

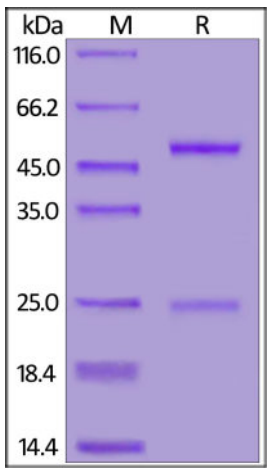
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

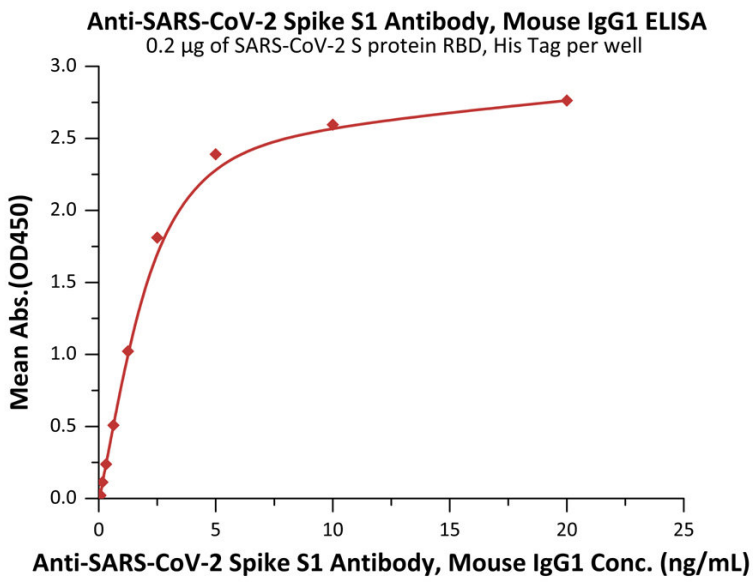
- For short term storage, the product is stable for up to 12 months at 2-8°C from date of receipt.

SDS-PAGE

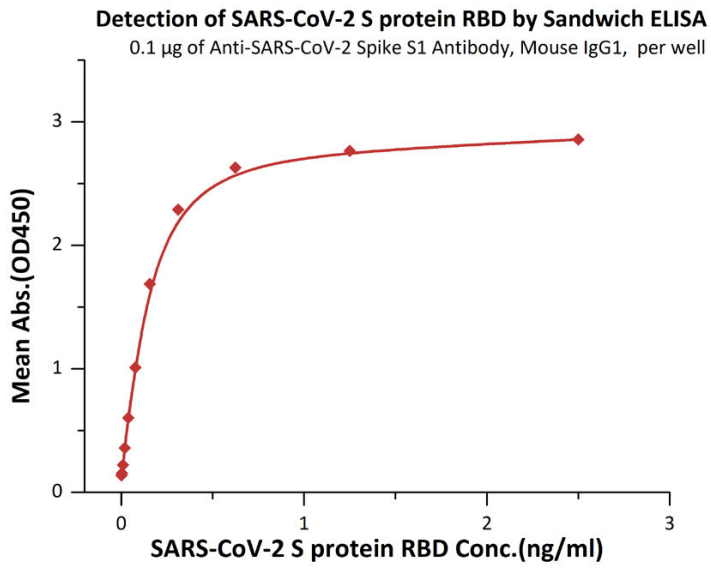


Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-Elisa

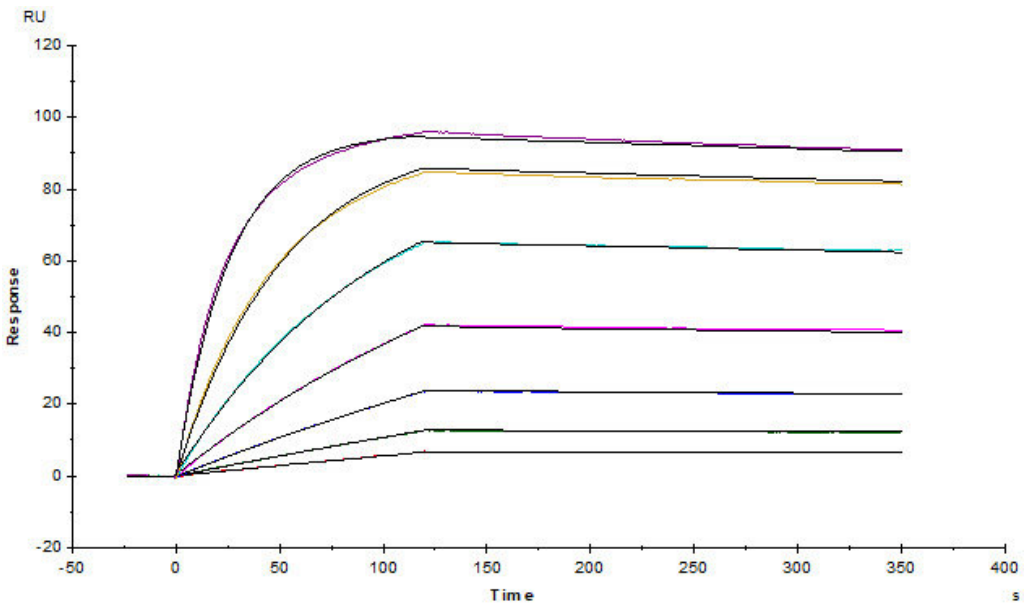


Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) at 2 μg/mL (100 μL/well) can bind Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (Cat. No. S1N-S58) with a linear range of 0.15-2.5 ng/mL (QC tested).



Detection SARS-CoV-2 S protein RBD by Sandwich ELISA Assay. Immobilized Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (Cat. No. S1N-S58) at 1 μg/mL (100 μL/well) can bind S protein RBD. And then add Anti-SARS-CoV-2 Spike S1 Antibody at 1:5000. Detection was performed using high sensitivity HRP-conjugated streptavidin with sensitivity of 5 pg/mL (Routinely tested).

Bioactivity-SPR



Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (Cat. No. S1N-S58) captured on CM5 chip via Anti-mouse antibodies surface can bind SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H3) with an affinity constant of 0.246 nM as determined in a SPR assay (Biacore T200) (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

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