Source

Mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with S1 protein $F(ab')_2$.

Isotype

Mouse IgG1/kappa

Specificity

This product is a specific antibody against SARS-CoV-2 Spike protein RBD domain. No cross-reactivity is deteced 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.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 . Normally trehalose is added as protectant before lyophilization.

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

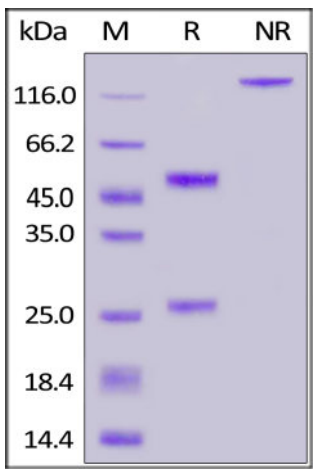
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

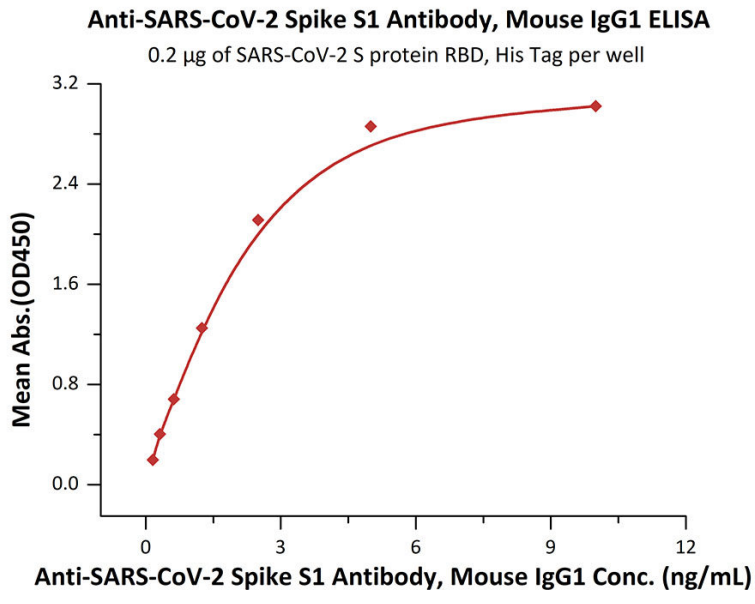
- -20 to -70°C for 12 months in lyophilized state from date of receipt;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight 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-S58A1) with a linear range of 0.08-3 ng/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.

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