

### Source

Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (AS58) (S1N-S58A1), 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**

Lyophilized from  $0.22~\mu m$  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**

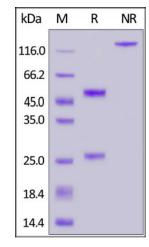
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

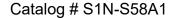
### **SDS-PAGE**



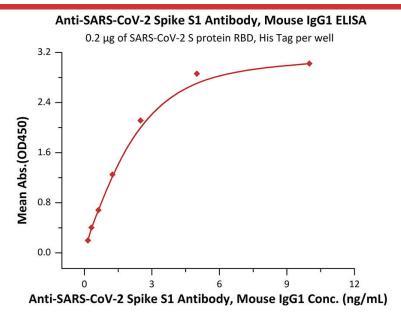
Anti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (AS58) on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-Elisa**

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







Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bindAnti-SARS-CoV-2 Spike S1 Antibody, Mouse IgG1 (AS58) (Cat. No. S1N-S58A1) with a linear range of 0.08-3 ng/mL (QC 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.