

Source

Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS47) (NUN-S47L8) was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified recombinant SARS-CoV-2 Nucleocapsid protein. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

Isotype

Mouse IgG1 / kappa

Specificity

The cross-reactivity with other coronaviruses has not been tested yet.

Application

This antibody can be paired with other Anti-SARS-CoV-2 Nucleocapsid antibodies to detect SARS-CoV-2 Nucleocapsid 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 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

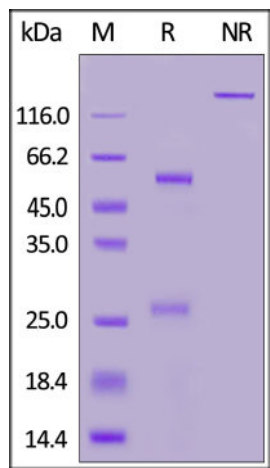
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

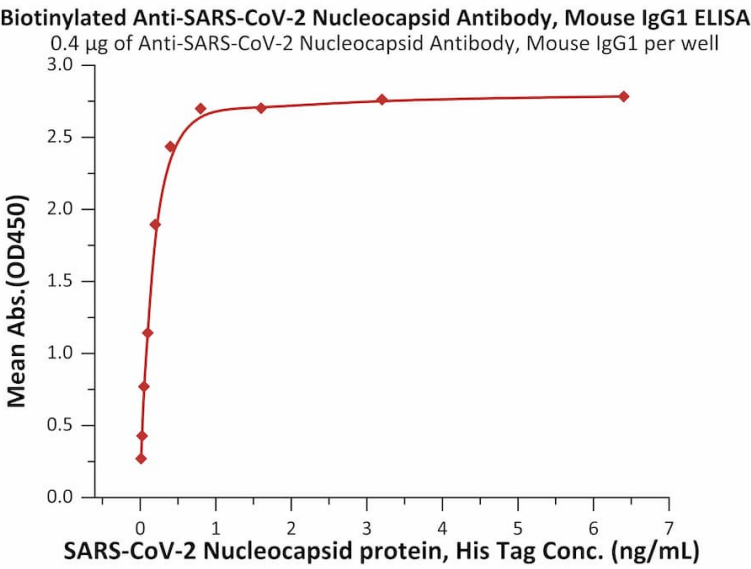
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS47) 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



Detection SARS-CoV-2 Nucleocapsid Protein by Sandwich ELISA Assay.
Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) (Cat. No. NUN-S46) at 4 µg/mL (100 µL/well) can bind SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227). And then add Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS47) (Cat. No. NUN-S47L8) at 0.05 µg/mL. Detection was performed using high sensitivity HRP-conjugated streptavidin with sensitivity of 12.5 pg/mL (QC tested).

Background

Nucleocapsid (N) protein is the most abundant protein found in coronavirus. CoV N protein is a highly immunogenic phosphoprotein important for viral genome replication and modulation of cell signaling pathways. It was first identified by a research team while they were screening for ADP-ribosylated proteins during coronavirus (CoV) infection (Grunewald M. E., et al. 2017, Virology; 517: 62-68). The array of diverse functional activities accommodated in N protein makes it more than a structural protein but also an interesting target in the development of antiviral therapeutics. Because of the conservation of N protein sequence and its strong immunogenicity, N protein of coronavirus is chosen as a diagnostic tool.

Clinical and Translational Updates

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