Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (NUN-S41) is isolated from a SARS-CoV-2 infected patient and is recombinantly produced from human 293 cells (HEK293).

Isotype

Human IgG1/kappa

Specificity

This product can recognize SARS-CoV-2 and SARS-CoV Nucleocapsid protein. No cross-reactivity is deteced with nucleocapsid protein of other coronaviruses, including MERS-CoV, HCoV-229E, HCoV-NL63, HCoV-OC43 and HCoV-HKU1.

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 . 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

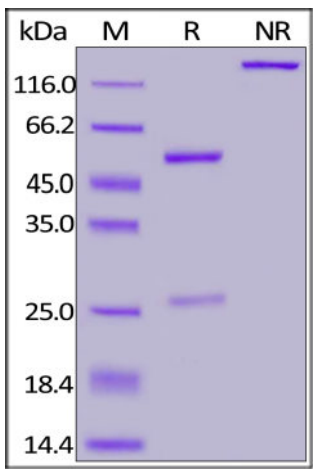
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

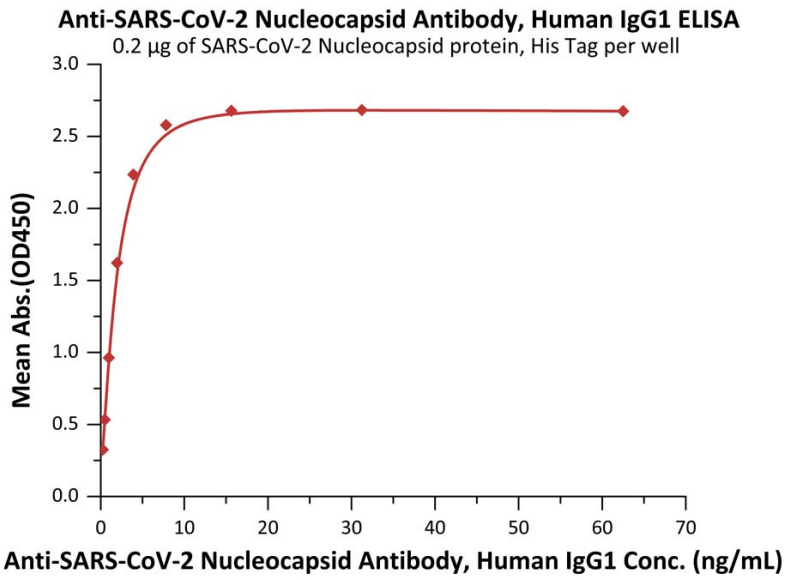
- -20 to -70°C for 12 months in lyophilized state from date of receipt;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Anti-SARS-CoV-2 Nucleocapsid Antibody, Human 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 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at 2 μg/mL (100 μL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (Cat. No. NUN-S41) with a linear range of 0.2-2 ng/mL (QC tested).

Background

Nucleocapsid protein is a most abundant protein of coronavirus. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. While screening for ADP-ribosylated proteins during coronavirus (CoV) infection, we identified as the viral nucleocapsid (N) protein. Novel post-translation modification of the CoV N protein that may play a regulatory role for this important structural protein. The array of diverse functional activities accommodated in the hantaviral N protein goes far beyond to be a static structural protein and makes it an interesting target in the development of antiviral therapeutics. Because of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

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