

### Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (NUN-S41A1) is isolated from a SARS-CoV-2 infected patient and is recombinantly produced from human 293 cells (HEK293). As verified by binding test with N-NTD (Cat.No. NUN-C5143) and N-CTD (Cat.No. NUN-C5145) protein, this antibody can only bind to N-CTD (AA Ser 255 - Pro 364).

# **Isotype**

Human IgG1/kappa

## **Specificity**

This product can recognize SARS-CoV-2 and SARS-CoV Nucleocapsid protein. No cross-reactivity is detected 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**

Supplied as  $0.2 \mu m$  filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

#### **Storage**

Please avoid repeated freeze-thaw cycles.

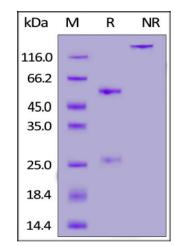
This product is stable after storage at:

- For long term storage, the product is stable for up to 3 years at -70°C from date of receipt;
- For short term storage, the product is stable for up to 12 months at 2-8°C from date of receipt.

### **Shipping**

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

#### **SDS-PAGE**



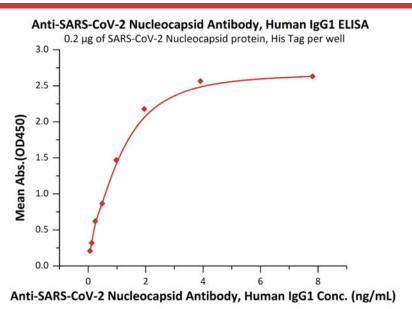
Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**

# Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1







Immobilized SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (Cat. No. NUN-S41A1) with a linear range of 0.06-1 ng/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.

## References

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