

### Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 is isolated from a SARS-CoV-2 infected patient and is recombinantly produced from CHO cells. This monoclonal antibody is purified by Protein A affinity chromatography. 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-NTD (AA Gly 44 - Glu 174). ELISA test validated that this antibody can bind multiple N protein variants with similar affinity as compared to the wild type N protein (Cat.No. NUN-C5227).

### Isotype

Human IgG1/kappa

### Specificity

This product can recognize SARS-CoV-2 Nucleocapsid protein. Cross-reactivity with Nucleocapsid protein of other coronaviruses has not been tested.

### Application

This antibody can be paired with other Anti-SARS-CoV-2 nucleocapsid antibodies (Cat. No. NUN-CH15) to detect SARS-CoV-2 nucleocapsid protein in sandwich ELISA or LFA assay.

### Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### Endotoxin

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

### Formulation

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

Contact us for customized product form or formulation.

### Shipping

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

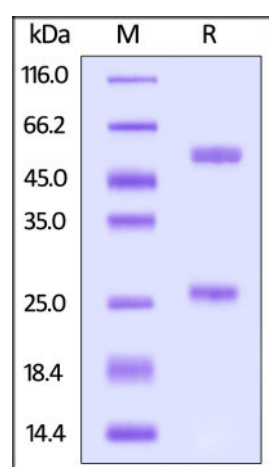
### Storage

*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  $-70^{\circ}\text{C}$  from date of receipt;
- For short term storage, the product is stable for up to 12 months at  $2-8^{\circ}\text{C}$  from date of receipt.

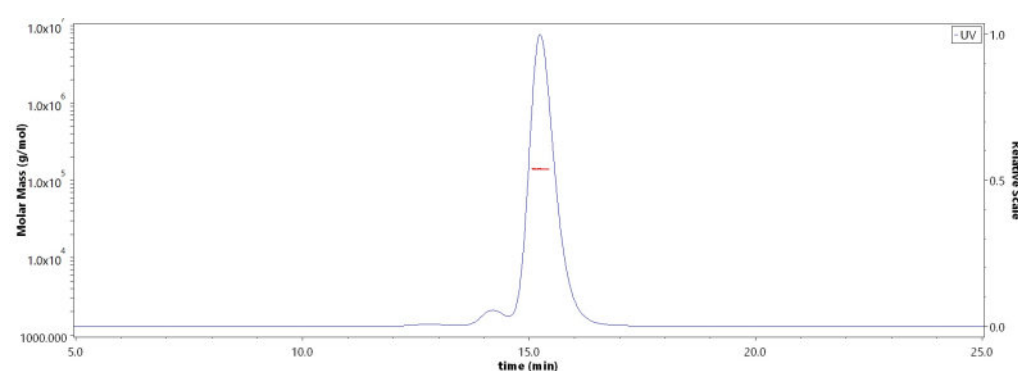
### SDS-PAGE



Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-Elisa

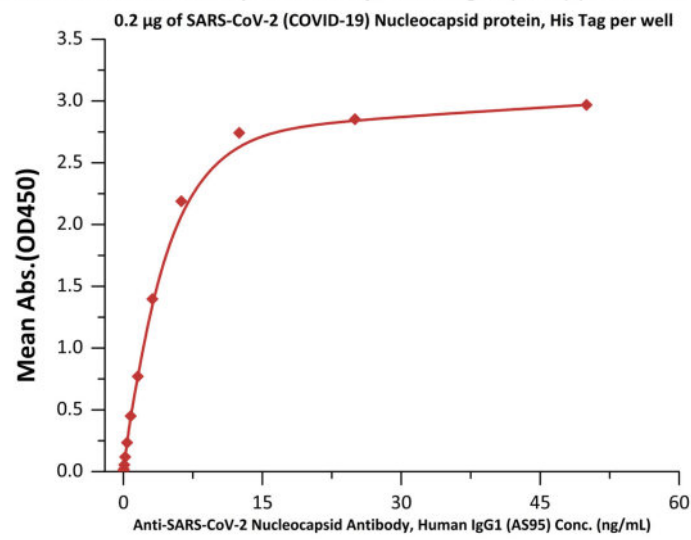
### SEC-MALS



The purity of Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (Cat. No. NUN-CH14) is more than 90% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.

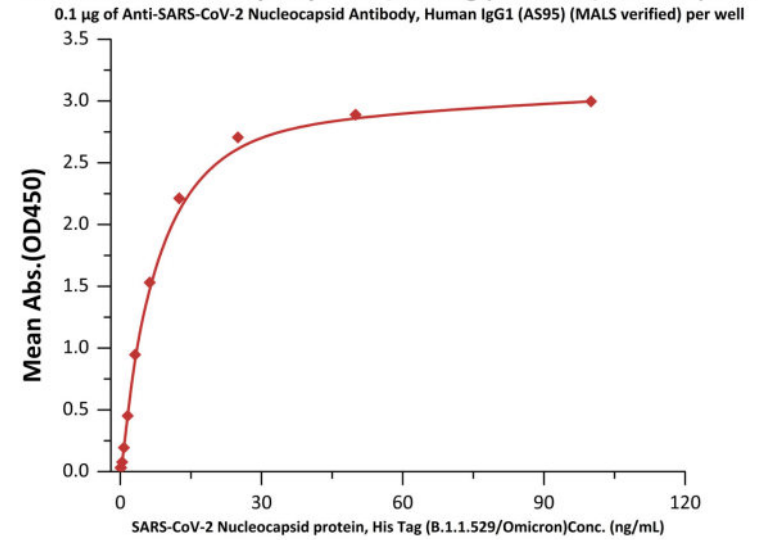
[Report](#)

Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (MALS verified) ELISA



Immobilized SARS-CoV-2 (COVID-19) Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at 2µg/mL (100µL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (Cat. No. NUN-CH14) with a linear range of 0.2-6 ng/mL (Routinely tested).

SARS-CoV-2 Nucleocapsid protein, His Tag (B.1.1.529/Omicron) ELISA



Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (Cat. No. NUN-CH14) at 1µg/mL (100µL/well) can bind SARS-CoV-2 Nucleocapsid protein, His Tag (B.1.1.529/Omicron) (Cat. No. NUN-C52Ht) with a linear range of 0.4-6 ng/mL (Routinely 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.