

#### 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).

Clone

AS95

Isotype

Human IgG1 | Human Kappa

Conjugate

Unconjugated

**Antibody Type** 

Recombinant Monoclonal

Reactivity

Virus

## **Specificity**

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

#### **Application**

Application	Recommended Usage
11	•

ELISA 0.2-50 ng/mL

#### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Purification**

Protein A purified/ Protein G purified

#### **Formulation**

Supplied as 0.2 µm filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

## **Shipping**

This product is supplied and shipped with dry ice, please inquire the shipping

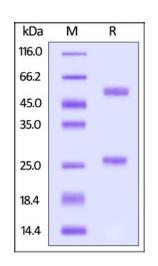
#### Storage

Please avoid repeated freeze-thaw cycles.

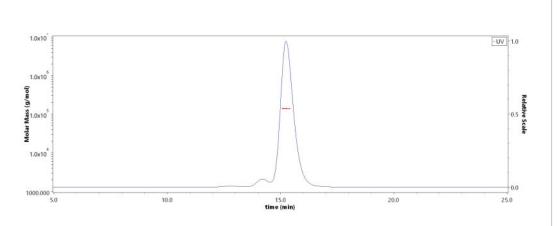
This product is stable after storage at:

- 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.

## **SDS-PAGE**



# SEC-MALS





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

Catalog # NUN-CH14

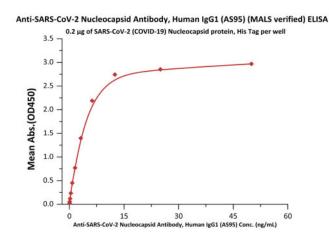


Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

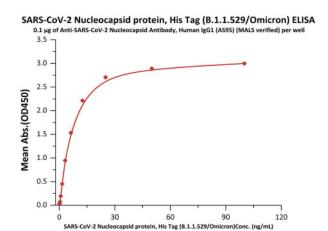
The purity of Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (Cat. No. NUN-CH14) is more than 90% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.

Report

## **Bioactivity-ELISA**



Immobilized SARS-CoV-2 (COVID-19) 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 (AS95) (Cat. No. NUN-CH14) with a linear range of 0.2-6 ng/mL (Routinely tested).



Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AS95) (Cat. No. NUN-CH14) at  $1\mu g/mL$  ( $100\mu L/well$ ) 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**

