# Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (MALS verified)

Catalog # NUN-CH15

## Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 is a chimeric monoclonal antibody recombinantly expressed from CHO cells, which combines the variable region of a mouse monoclonal antibody with human IgG1 constant domain. The mouse monoclonal antibody was obtained from a mouse immunized with recombinant SARS-CoV-2 Nucleocapsid Protein. This chimeric 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-CTD (AA Ser 255 - Pro 364). It can also bind multiple N protein variants with similar affinity as compared to the wild type N protein (Cat. No. NUN-C5227).

## Clone

AM223

## 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 |
|---|---|
| ELISA | 0.2-50 ng/mL |

## Purity

>95% as determined by SDS-PAGE.

>95% 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 cost.***

## Storage

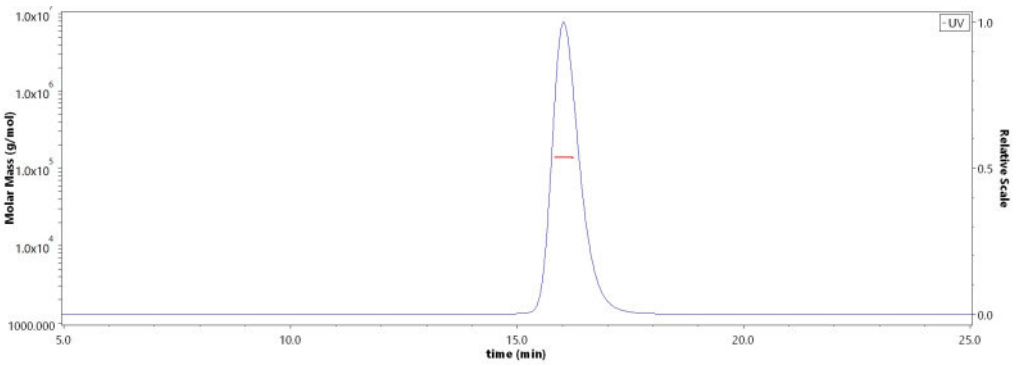
***Please avoid repeated freeze-thaw cycles.***

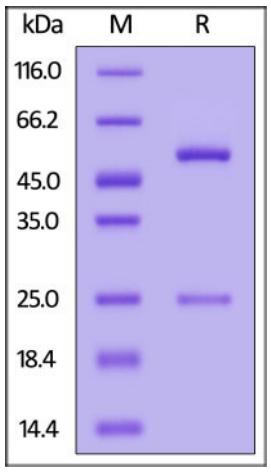
This product is stable after storage at:

- For long term storage, the product is stable for up to 3 years at -70°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

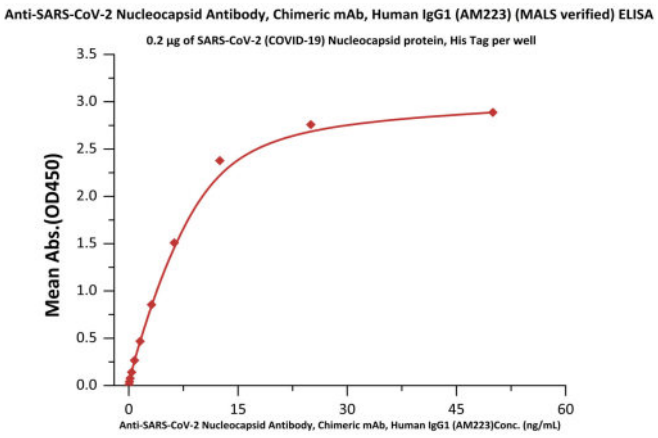




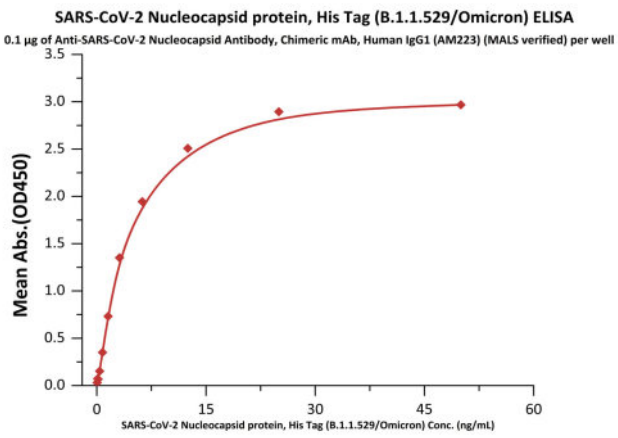

Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

The purity of Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (Cat. No. NUN-CH15) is more than 95% 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 2μg/mL (100μL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AM223) (Cat. No. NUN-CH15) with a linear range of 0.2-6 ng/mL (Routinely tested).




Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AM223) (Cat. No. NUN-CH15) 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 0.2-6 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