

## Source

Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) is a chimeric monoclonal antibody recombinantly expressed from HEK293 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.

## Isotype

Human IgG1/kappa

## Specificity

This product can recognize SARS-CoV-2 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.

>95% 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.*

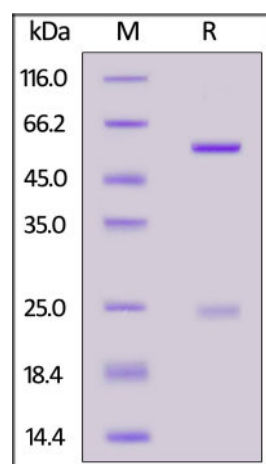
## Storage

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product MUST be stored at  $-70^{\circ}\text{C}$  or lower upon receipt;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions.

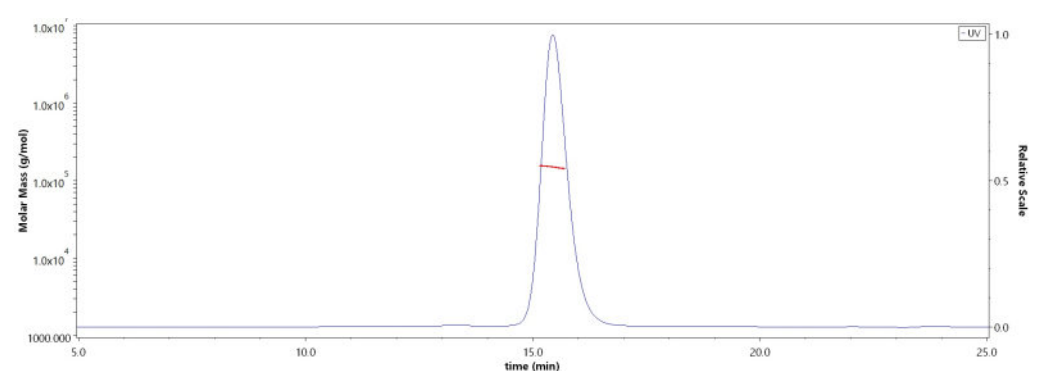
## SDS-PAGE



Biotinylated 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%.

## Bioactivity-Elisa

## SEC-MALS

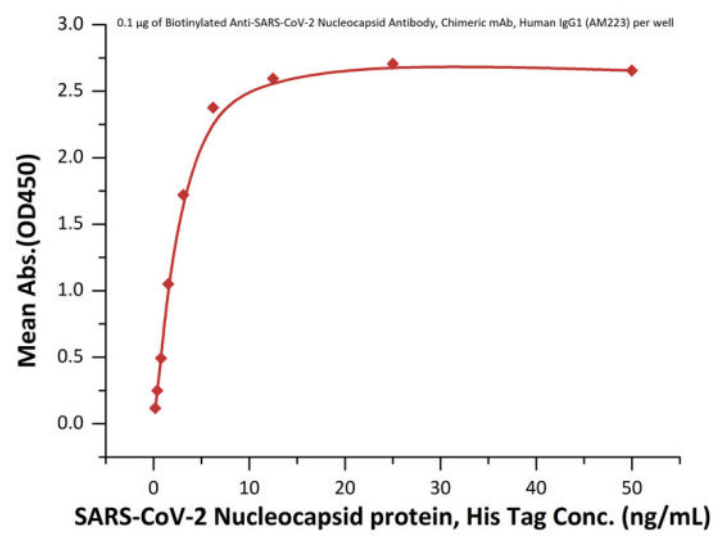


The purity of Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (Cat. No. NUN-BM272) is more than 95% and the molecular weight of this protein is around 135-160 kDa verified by SEC-MALS.

[Report](#)

Catalog # NUN-BM272

Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) ELISA



Immobilized Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (Cat. No. NUN-BM272) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) 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

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.