



## Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) (NUN-S46) was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified recombinant SARS-CoV-2 Nucleocapsid protein. The IgG fraction of the cell culture supernatant was 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).

## Clone

AS46

## Species

Mouse

## Isotype

Mouse IgG1 | Mouse Kappa

## Conjugate

Unconjugated

## Reactivity

Virus

## 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

Application	Recommended Usage
ELISA	0.2-10 ng/mL

## Purity

>95% as determined by SDS-PAGE.

## 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 blue ice, please inquire the shipping cost.*

## Storage

*Please avoid repeated freeze-thaw cycles.*

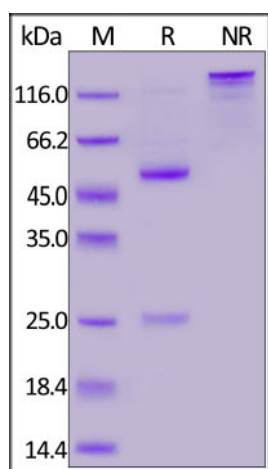
This product is stable after storage at:

- 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

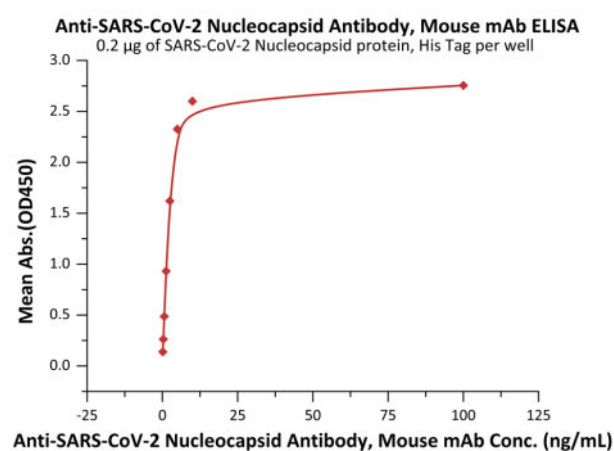
Discounts, Gifts,  
and more!



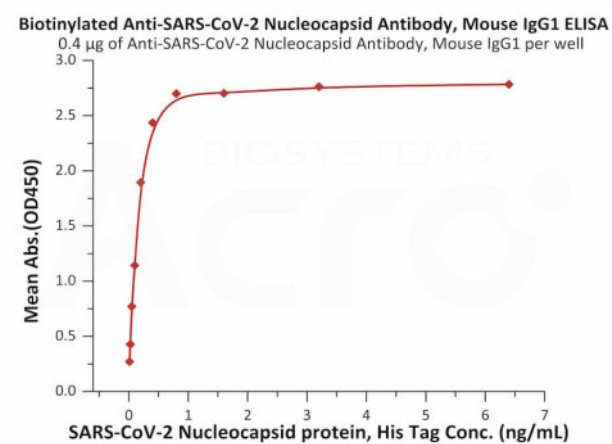


Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

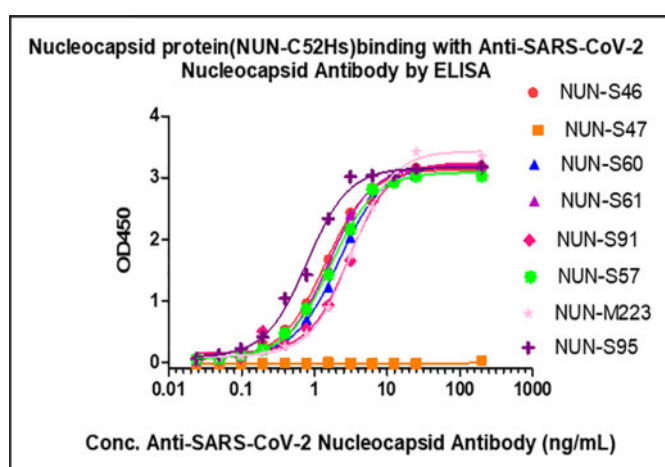
### Bioactivity-ELISA



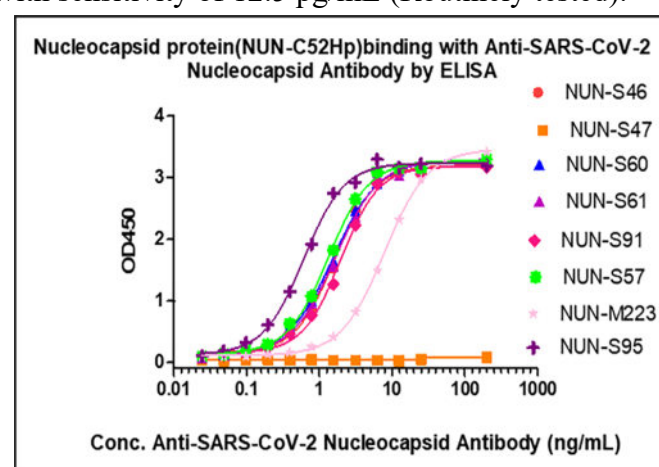
Immobilized SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at 2 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (Cat. No. NUN-S46) with a linear range of 0.15-2.5 ng/mL (QC tested).



**Detection SARS-CoV-2 Nucleocapsid Protein by Sandwich ELISA Assay.** Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) (Cat. No. NUN-S46) at 4 µg/mL (100 µL/well) can bind SARS-CoV-2 Nucleocapsid Protein (Cat. No. NUN-C5227). And then add Biotinylated Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (Cat. No. NUN-S47L8) at 0.05 µg/mL. Detection was performed using high sensitivity HRP-conjugated streptavidin with sensitivity of 12.5 pg/mL (Routinely tested).



Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) (Cat. No. NUN-S46) can bind the Delta variant of nucleocapsid protein (Cat. No. NUN-C52Hs).



Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) (Cat. No. NUN-S46) can bind the Delta variant of nucleocapsid protein (Cat. No. NUN-C52Hp).

### Background

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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**

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