Catalog # NUN-S46



## 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.

Usage

# Application

Application	<b>Recommended</b> Us
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.

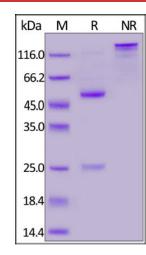


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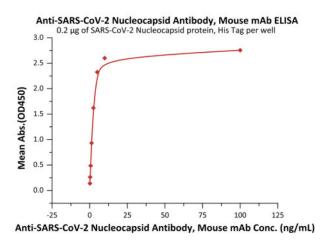


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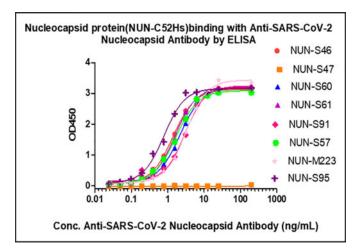


Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (AS46) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

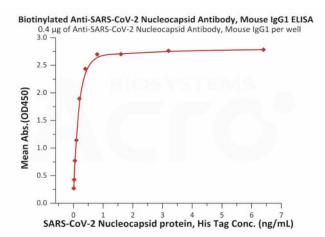
# **Bioactivity-ELISA**



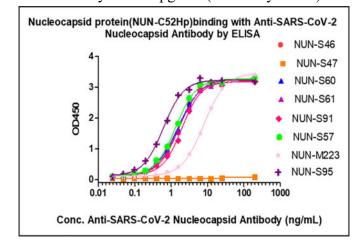
Immobilized SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Mouse IgG1 (Cat. No. NUN-S46) with a linear range of 0.15-2.5 ng/mL (QC tested).



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



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  $\mu$ g/mL (100  $\mu$ L/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  $\mu$ g/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-





C52Hp).

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## Catalog # NUN-S46

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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