

Rev05 DATASHEET

Update: Oct,19,2022

# SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse

Cat. No.: A02135

#### **Overview**

Specificity	GenScript SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse is specific for SARS-CoV-2 Nucleocapsid protein of wild type, delta variant, and omicron variant.	
<b>Host Species</b>	Mouse	
Immunogen	Recombinant SARS-CoV-2 Nucleocapsid protein	
Conjugate	Unconjugated	

## **Applications**

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Application	Recommended Usage
ELISA	1:1,000 - 1:5,000
Chemiluminescent immunoassay (CLIA)	1:1,000 - 1:5,000
Western Blot	1:100 - 1:1,000
Lateral flow assay (LFA)	A02135(C) - A02136 (D); A02135(C) - A02138(D)

## **Properties**

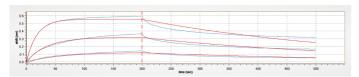
Form	Liquid
Storage Buffer	PBS, pH 7.2, 0.02% sodium azide
Concentration	1 mg/ml

#### GenScript USA, Inc.



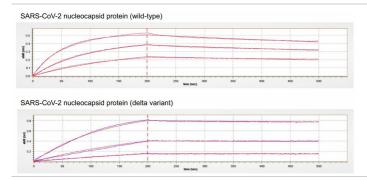
Storage Instructions	Store at -20°C. This product is stable for 1 year upon receipt, when handled and stored as instructed. Avoid repeated freezing and thawing cycles.
Purification	Affinity chromatography
Isotype	Mouse IgG
Clonality	Monoclonal
Clone ID	N338
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

#### **Examples**



BLI (Biolayer interferometry) binding affinity measurements of SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse (GenScript, A02135) to nucleocapsid protein of SARS-CoV-2 omicron variant.

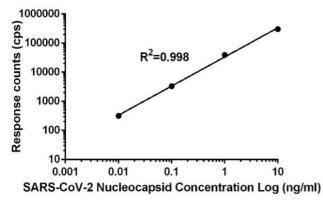
SARS-CoV-2 Nucleocapsid Antibody (N338) captured on Protein A sensors surface can bind omicron variant with dissociation constant (KD) of 5.56E-09M.



BLI (Biolayer interferometry) binding affinity measurements of SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse(GenScript, A02135) to SARS-CoV-2 Nucleocapsid protein of wild type and delta variant.

SARS-CoV-2 Nucleocapsid Antibody (N338) captured on Protein A sensors surface can bind wild-type or delta variant with dissociation constant (KD) of 3.62E-09M and 1.58E-09M.

LFA Analysis with A02135 (N338) as capture antibody and A02136 (N34) as detection antibody



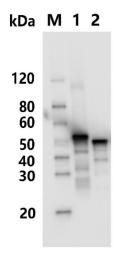
Standard curve of SARS-CoV-2 Nucleocapsid Protein LFA Assay.

The LFA assay is developed by using SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse(GenScript, A02135) and MonoRab™ SARS-CoV-2 Nucleocapsid Antibody (N34), mAb, Rabbit(GenScript, A02136) as the capture and detection antibodies, respectively.

The combination shows good dose response of fluorescence intensity and concentrations of SARS-CoV-2 Nucleocapsid protein in LFA assay.

Nucleocapsid protein concentration was nicely correlated with fluorescence intensity.





Western Blot of wild-type and delta variant Nucleocapsid protein cell lysates with SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse (GenScript, A02135).

M: Protein Marker (GenScript, M00521)

Lane 1: 3 μg Wild-type N protein cell lysate

Lane 2: 3 µg Delta N protein cell lysate

Primary Antibody:

SARS-CoV-2 Nucleocapsid Antibody (N338), mAb, mouse (GenScript, A02135) 1 µg/ml

Secondary Antibody:

Anti-Mouse IgG (whole molecule)–Peroxidase antibody produced in rabbit (Sigma, A9044)

## **Background**

**Target Background:** SARS-CoV-2 (Severe acute respiratory syndrome coronavirus 2), also known as 2019-nCoV, is a positive-sense single-stranded RNA virus. It caused coronavirus disease 2019 (COVID-19). Nucleocapsid Protein is a most abundant structure protein of the coronavirus which is associated with nucleic acid.

**Synonyms:** Mouse Anti-COVID19 N Protein Antibody; Mouse Anti-SARS-CoV-2 NP Antibody; Sars/sars-CoV-2 Coronavirus Nucleocapsid Monoclonal Antibody

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.