

SARS-CoV-2 Nucleocapsid Protein CTD, His Tag (MALS verified)

Catalog # NUN-C5145



BIOSYSTEMS
Acro

Synonyms

Nucleocapsid protein, NP, Protein N

Source

SARS-CoV-2 Nucleocapsid Protein CTD, His Tag (NUN-C5145) is expressed from *E. coli* cells. It contains AA Ser 255 - Pro 364 (Accession # [QHO62115.1](#)).

Predicted N-terminus: Met

Molecular Characterization

Poly-his	Nucleocapsid protein(Ser 255 - Pro 364) QHO62115.1
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This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 13.4 kDa. The protein migrates as 15 kDa under reducing (R) condition (SDS-PAGE).

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

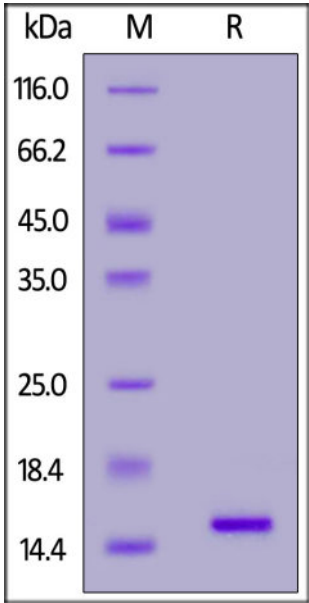
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

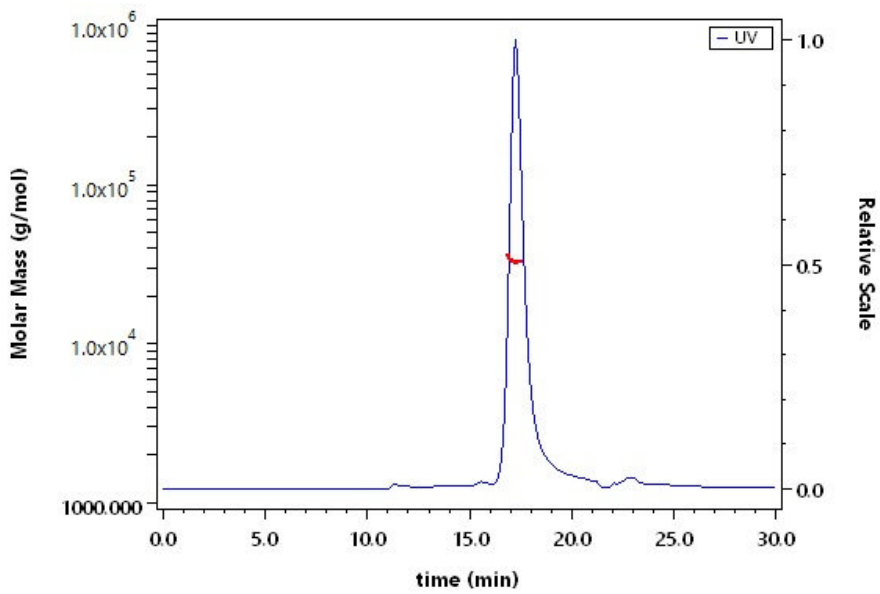
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



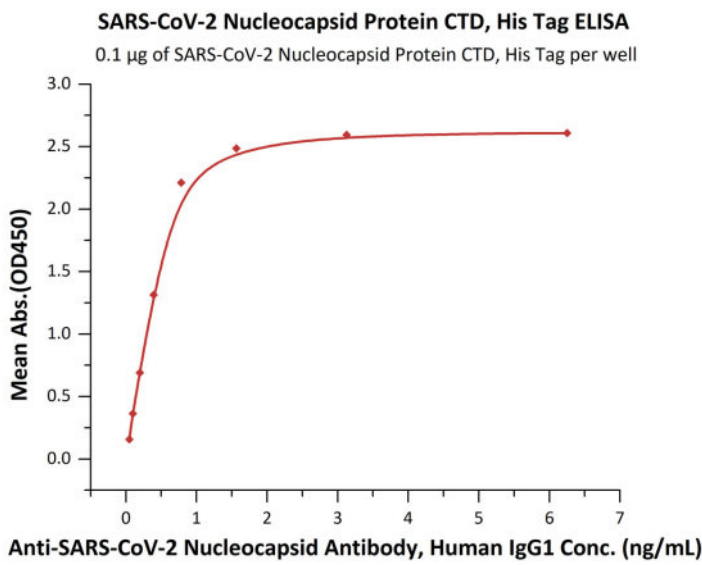
SARS-CoV-2 Nucleocapsid Protein CTD, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

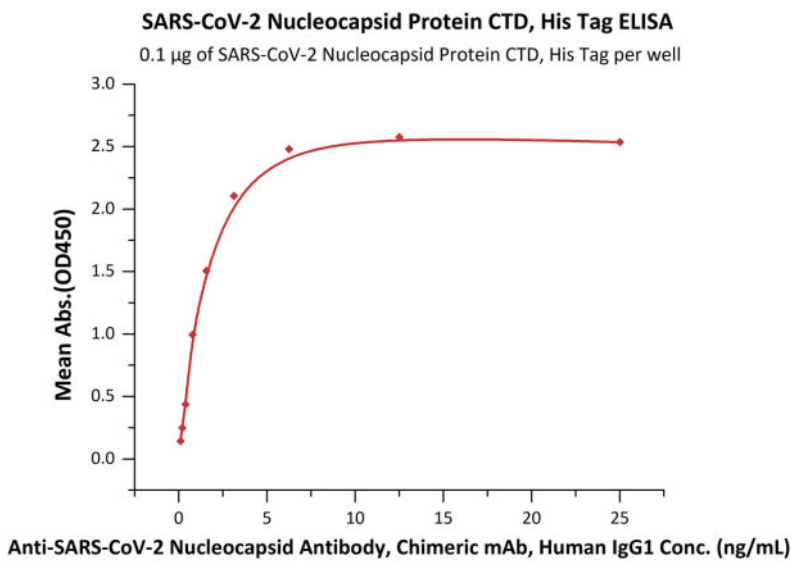


The purity of SARS-CoV-2 Nucleocapsid Protein CTD, His Tag (Cat. No. NUN-C5145) is more than 90% and the molecular weight of this protein is around 28-38 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized SARS-CoV-2 Nucleocapsid Protein CTD, His Tag (Cat. No. NUN-C5145) at 1 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).



Immobilized SARS-CoV-2 Nucleocapsid Protein CTD, His Tag (Cat. No. NUN-C5145) at 1 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 with a linear range of 0.1-6 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.



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