Synonym

Nucleocapsid protein,NP,Protein N

Source

SARS-CoV-2 Nucleocapsid protein, His Tag (NUN-C51H2) is expressed from E. coli cells.
Predicted N-terminus: Met

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 51.0 kDa. The protein migrates as 53-55 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 10 mM PB, Arginine, 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.

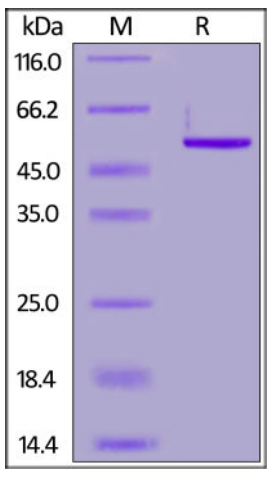
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

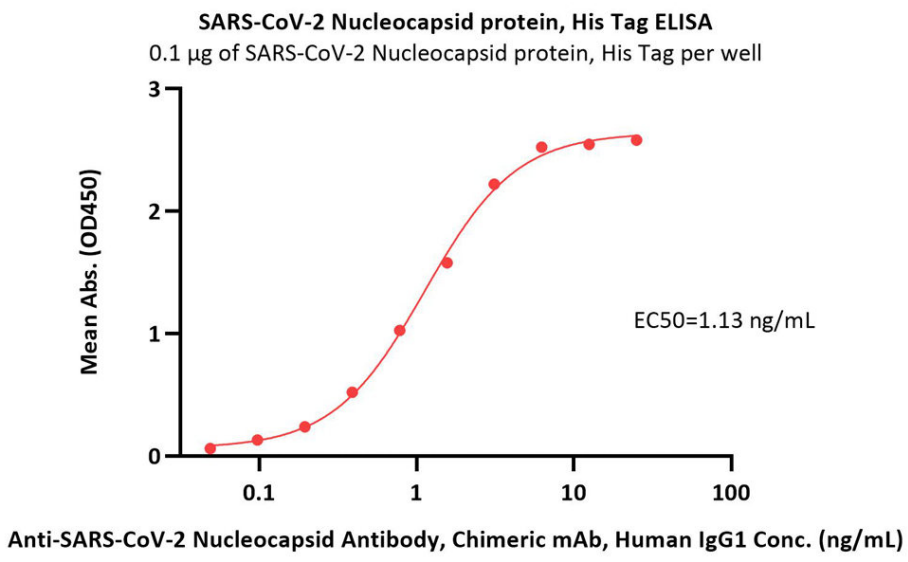
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



SARS-CoV-2 Nucleocapsid protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized SARS-CoV-2 Nucleocapsid protein, His Tag (Cat. No. NUN-C51H2) at 1 μg/mL (100 μL/well) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (Cat. No. NUN-CH15) with a linear range of 0.1-3 ng/mL (QC 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 if you have any question on this product.