

Synonym

Nucleocapsid protein, NP, Protein N

Source

HCoV-OC43 Nucleocapsid, His Tag(NUN-V5145) is expressed from E.coli cells. It contains AA Met 1 - Ile 448 (Accession # [P33469-1](#)).

Predicted N-terminus: Met 1

Molecular Characterization

Poly-his	Nucleocapsid protein(Met 1 - Ile 448) P33469-1
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This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 50.3 kDa. The protein migrates as 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

Lyophilized from 0.22 µm filtered solution in 40 mM PB, 500 mM NaCl, 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.

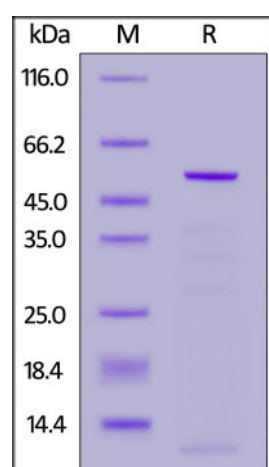
Storage

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.

SDS-PAGE

HCoV-OC43 Nucleocapsid, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

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.