

Product Information

SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His tag)

Catalog Number	Packaging Size
P100	100 µg

Storage upon receipt:

- -20°C to -80°C
- Avoid repeated freeze-thaw cycles

Product Description

Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is a most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

Alternative Names:

Coronavirus NP Protein, 2019-nCoV; coronavirus Nucleocapsid Protein, 2019-nCoV; coronavirus Nucleoprotein Protein, 2019-nCoV; cov np Protein, 2019-nCoV; ncov NP Protein, 2019-nCoV; NCP-CoV Nucleocapsid Protein, 2019-nCoV; np Protein, 2019-nCoV; nucleocapsid Protein, 2019-nCoV; Nucleoprotein Protein, 2019-nCoV.

Protein Construction:

A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein

(Met1-Ala419) was expressed with a polyhistidine tag at the C-terminus.

Species:

SARS-CoV-2

Expressed Host:

E. coli cells

Purity:

> 90 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

Predicted N Terminal:

Met

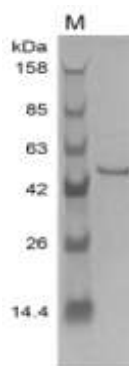
Molecule Weight:

The recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His tag) consists of 430 amino acids and predicts a molecular mass of 47.08 kDa.

Protein Storage Buffer:

PBS, 50% glycerol, pH 7.4.

SDS-PAGE:



Reference:

1. Van Boheemen S, et al. (2012), MBio. 3(6):e00473-12.
2. Bisht H. et al., 2004, Proc Natl Acad Sci. 101 (17): 6641-6.
3. Li W. et al., 2005, Science. 309 (5742): 1864-8.