

## Recombinant SARS-CoV-2 Nucleocapsid Protein, Biotinylated (His Tag)

Catalog No. PKSR030512

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

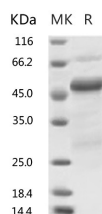
### Description

<b>Synonyms</b>	NP;2019-nCoV coronavirus NP Protein;2019-nCoV np Protein;2019-nCoV novel coronavirus Nucleoprotein Protein
<b>Species</b>	SARS-CoV-2
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Met1-Ala419(335Gly/Ala)
<b>Accession</b>	YP_009724397.2
<b>Calculated Molecular Weight</b>	47.1 kDa
<b>Tag</b>	C-His

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, 500 mM NaCl, pH 7.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 85 % as determined by reducing SDS-PAGE.

### Background

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

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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.