



# Recombinant SARS-CoV-2 Nucleocapsid (D3L, S235F) Protein [His] (DAGC505)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Species</b>	SARS-CoV-2
<b>Purity</b>	> 90 % as determined by SDS-PAGE.
<b>Conjugate</b>	His
<b>Applications</b>	SDS-PAGE
<b>Molecular Weight</b>	The recombinant SARS-CoV-2 Nucleocapsid Protein (D3L, S235F)-His Recombinant Protein consists of 425 amino acids and predicts a molecular mass of 46.5 kDa.
<b>Format</b>	Lyophilized
<b>Size</b>	100 µg
<b>Buffer</b>	Lyophilized from sterile 50 mM PB, 500 mM NaCl, pH 7.0.
<b>Preservative</b>	None
<b>Storage</b>	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

## BACKGROUND

<b>Introduction</b>	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. The coronavirus N protein is required for coronavirus RNA synthesis and has RNA chaperone activity that may be involved in template switch.
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Nucleocapsid protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to the 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 the N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

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**Keywords**

SARS-CoV-2; coronavirus; SARS-CoV-2 NP; SARS-CoV-2 Nucleocapsid Protein; SARS-CoV-2 N Protein

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