



# Recombinant SARS-CoV-2 Nucleocapsid (P13L) Protein [His] (DAGC516)

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 (P13L)-His Recombinant Protein consists of 426 amino acids and predicts a molecular mass of 46.6 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

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| <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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