

N

## Recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His Tag)

<b>Catalog No.</b>	CSI99002	<b>Quantity:</b>	100 µg
<b>Alternate Names:</b>	Nucleoprotein, Protein N, Nucleocapsid Protein, NC		
<b>Description:</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. 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.		
<b>UniProt ID:</b>	P0DTC9		
<b>Accession Number:</b>	YP_009724397.2		
<b>Protein Construction:</b>	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (Met1-Ala419(335Gly/Ala)) was expressed with a polyhistidine tag at the N-terminus.		
<b>Source:</b>	E. coli		
<b>Formulation:</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
<b>Molecular Weight:</b>	The recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His tag) consists of 426 amino acids with a predicted molecular mass of 46.61 kDa.		
<b>Purity:</b>	> 90 % as determined by SDS-PAGE.		
<b>Biological Activity:</b>	Testing in progress		
<b>Predicted N-terminal:</b>	Met		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. <b>DO NOT VORTEX.</b> Allow several minutes for complete reconstitution.		
<b>Storage &amp; Stability:</b>	Stable for up to 1 year from date of receipt at -20°C to -80°C After reconstitution, store working aliquots at -20°C to -80°C. <b>Avoid repeated freeze-thaw cycles.</b>		

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