

Product information

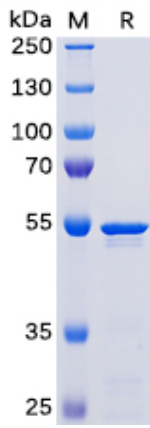
Catalog Number	PME100459
Description	SARS-CoV-2 (2019-nCoV) Nucleocapsid, His Tag
Synonyms	Nucleocapsid protein, NP, Protein N
Delivery	In Stock
Uniprot ID	P0DTC9
Expression Host	E.coli
Tag	N-His tag
Molecular Characterization	<div style="display: flex; align-items: center;"> <div style="background-color: #8B4513; color: white; padding: 2px 5px; margin-right: 5px;">6 × His tag</div> <div style="background-color: #DC143C; color: white; padding: 2px 5px;">Nucleocapsid protein(Met1-Ala419)</div> </div>
Molecular Weight	The protein has a predicted molecular mass of 49.4 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions.
Storage	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).Lyophilized proteins are shipped at ambient temperature.
Usage	Research use only
Images	

Figure 1. SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein, His Tag on SDS-PAGE under reducing condition.



SARS-CoV-2 (2019-nCoV) Nucleocapsid, His Tagged protein ELISA

0.2 µg of SARS-CoV-2 Nucleocapsid protein, His Tagged per well

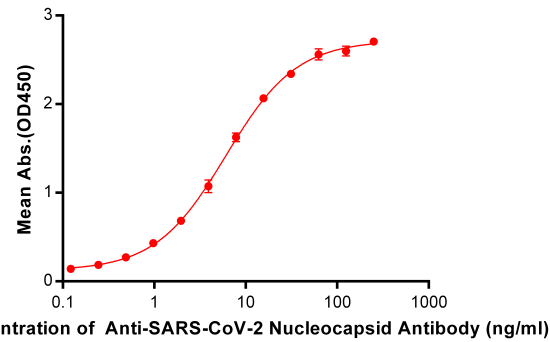


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) SARS-CoV-2 (2019-nCoV) Nucleocapsid, His Tag protein (PME100459) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody ([DME100015](#), [DME100016](#)) in a linear range of 0.122-15.625 ng/ml.

Background

Coronavirus contain most of nucleocapsid protein. Coronavirus nucleoproteins (N proteins) 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 nucleolus is the site of ribosome biogenesis and sequesters cell cycle regulatory complexes. Two of the major components of the nucleolus are fibrillarin and nucleolin. These proteins are involved in nucleolar assembly and ribosome biogenesis and act as chaperones for the import of proteins into the nucleolus. Regarding of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is a tool for diagnostic.

