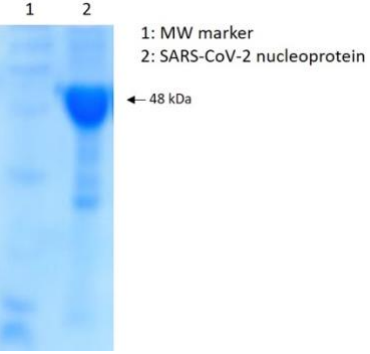




PRODUCT DATASHEET

Catalog No:	BSV-COV-PR-22
Pack Size	100 µg
Product Name:	SARS-CoV-2 Nucleoprotein, His-Tag (E. Coli)
Description:	Recombinant SARS-CoV-2 nucleocapsid phosphoprotein (GenBank: MN908947, isolate Wuhan-Hu-1), expressed and purified from E. coli as full-length nucleoprotein (amino acids 1-419), with a C-terminal 6xHis-tag.
Species:	2019-nCoV, SARS-CoV-2
Concentration:	2.4 mg/ml
Sequence:	Recombinant SARS-CoV-2 nucleocapsid phosphoprotein (GenBank: MN908947, isolate Wuhan-Hu-1), expressed and purified from E. coli as full-length nucleoprotein (amino acids 1-419), with a C-terminal 6xHis-tag.
Accession No.:	MN908947
Tag:	C-terminal His-Tag
Host:	E. Coli
Applications:	
Purity:	>95% as determined by SDS-PAGE.

<p>Predicted Molecular Mass:</p>	 <p>SARS-CoV-2 Nucleoprotein, His-Tag (<i>E.coli</i>) consists of amino acids 1 – 419 of the full-length SARS-CoV-2 nucleoprotein and predicts a molecular mass of 48 kDa.</p>
<p>Formulation:</p>	<p>Recombinant protein stored in 25mM Tris base, 10mM K2CO3, pH 9.2-9.4.</p>
<p>Endotoxin:</p>	<p>Endotoxin level is < 0.1 ng/μg of protein (<1.0 EU/μg purified protein) (LAL test)</p>
<p>Shipping, Storage and Stability:</p>	<p>Liquid Protein, shipped on Dry Ice. Store at -20°C. For most favorable performance avoid repeated handling and multiple freeze/thaw cycles.</p>
<p>Background:</p>	<p>Coronaviruses have a positive-sense RNA genome 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 Nucleocapsid (N) protein.</p> <p>The N protein is a structural protein that binds to the coronavirus RNA genome, thus creating a shell (or capsid) around the enclosed nucleic acid. Besides</p> <ol style="list-style-type: none"> 1. interacts with the viral membrane protein during viral assembly 2. assists in RNA synthesis and folding 3. plays a role in virus budding 4. affects host cell responses, including cell cycle and translation. <p>Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. N protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to formation of the helical nucleocapsid. It is a highly immunogenic phosphoprotein, also implicated in viral genome replication, and in modulating cell signalling pathways. It is chosen as a diagnostic tool, due to the conservation of N protein sequence and its strong immunogenicity.</p>

FOR

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