

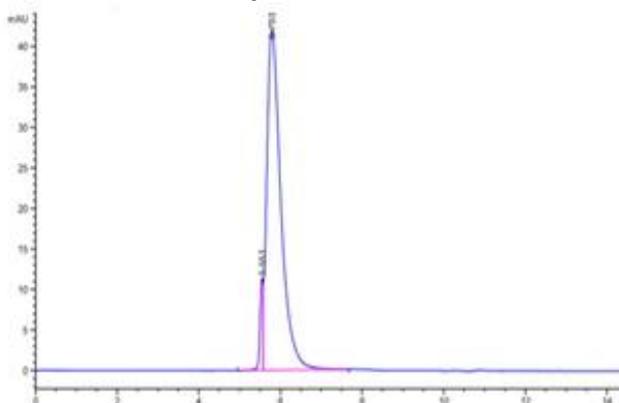
Datasheet

SARS-CoV-2 Omicron (B.1.1.529) Nucleocapsid Recombinant Protein (His tag)

Catalogue No:	BSV-COV-PR-56	BSV-COV-PR-57
Pack Size:	100µg	500µg
Product Name:	SARS-CoV-2 Omicron (B.1.1.529) Nucleocapsid Recombinant Protein (His tag)	
Species:	2019-nCoV, COVID-19	
Accession No:	YP_009724397.2	
Tag:	His-tag	
Source:	DNA sequence encoding extracellular fragment [1-419] of COV2 Nucleocapsid protein (B.1.1.529/Omicron) variant (P13L, E31 R32S33 deletion, R203K, G204R) including a C terminal polyHis tag was expressed in HEK cells.	

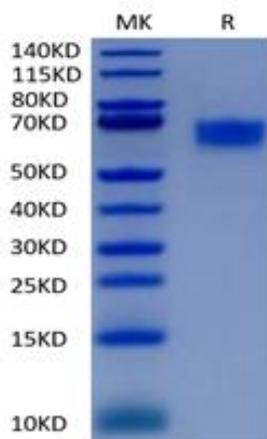
>95%, as determined by SEC-HPLC

Purity:



The recombinant Nucleocapsid-His protein migrates as 70 kDa under reducing conditions in SDS-PAGE due to glycosylation.

Molecular Weight:



Endotoxin:	Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/μg (1EU/μg).
Presentation:	Recombinant COVID-19 nucleocapsid was lyophilized from 0.2 μm filtered PBS solution pH 7.4.
Reconstitution:	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/ml. This solution can then be diluted into other buffers.
Shipping, Storage & Stability:	Lyophilized protein-shipped at ambient temperature. The lyophilized protein is stable for at least 2 years from date of receipt at -20°C. Repeated freeze-thaw cycles should be avoided.
Background:	<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 RESEARCH USE ONLY