

SARS-CoV-2 N-Protein, delta N-Term, His-tag

Nucleocapsid protein

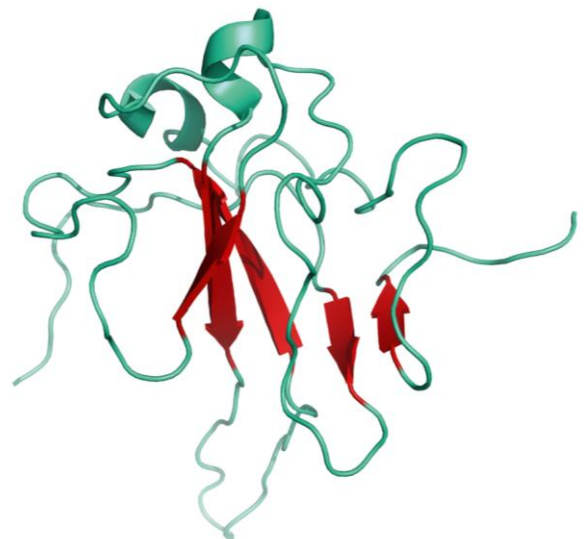
Cat. no. P2020-058

Product Information

Protein:	SARS-CoV-2 N-Protein, delta N-term, His-tag (~ 35.0 kDa)
Uniprot#:	PODTC9
Sequence:	MGLPYGANKDGIWVATEGALNTPKDHIGTRNPANNAIVLQLPQGTTLPKGFYAEGSRG GSQASSRSSSRNSSRNSTPGSSRGTSPARMAGNGGDAALALLLDRLNQLSKMSGKG QQQQGQTVTKKSAEASKKPRQKRTATKAYNVTQAFGRRGPEQTQGNFGDQELIRQGTDY KHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVILLNKHID AYKTFPPTTEPKDKKKKADETQALPQRQKKQQTVLLPAADLDDFSKQLQQSMSSADSTQ AS
tag	Methionine at pos. 1 present might be present due to cloning constraints, N-terminal His-not shown in sequence.
Source:	Recombinantly expressed in <i>E. coli</i> .
Tag(s):	His-tag, N-terminal
Purification:	Purified by affinity chromatography and subsequent buffer exchange.
Formulation:	PBS; pH 7.4 Liquid, stored and shipped at -80 °C.
Purity:	> 95 % (will be determined by densitometry of Coomassie stained gel, example next page)
Concentration:	Will be determined by BCA-Assay.
Long-term storage:	No recommendations.

Background Information:

Beneath its envelope membrane, the new coronavirus SARS-CoV-2 consists of an icosahedral nucleocapsid that contains its genetic information in form of positive sense single-stranded RNA. The RNA is contained in a nucleoprotein complex, consisting of the SARS-CoV-2 (COVID-19) Nucleocapsid protein. This phosphoprotein is necessary to keep the capsid in its helical symmetry and aids with packaging into the viral capsid by acting as a molecular RNA chaperone. Together with the matrix (M) protein, the N-protein is one of the most abundant proteins in the viral particle, it is important for viral replication and is also known for modulating cellular signalling. It is highly immunogenic and its sequence is very conserved, mainly in the N-terminal domain. Therefore, the N-terminal truncated variant is often preferred for diagnostic purposes to minimize false positive results.



Structural model of the Nucleocapsid protein of SARS-CoV-2 (RNA binding domain only, amino acids 43-180). Beta strands are highlighted (red).

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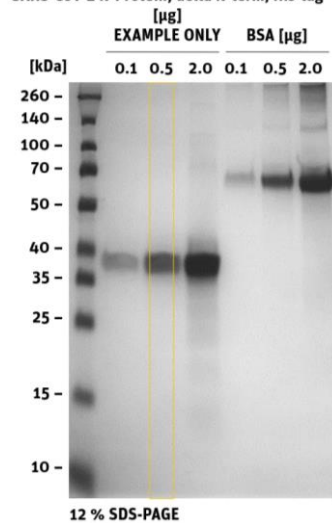
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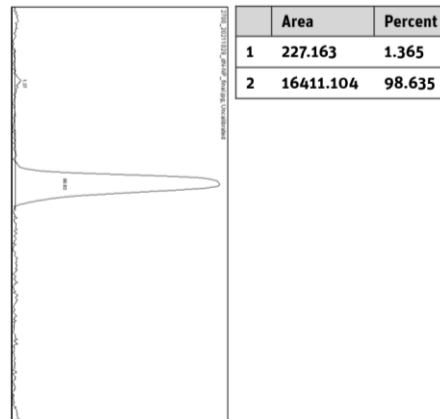
Product Information

Quality Information (provided for each lot):

SARS-CoV-2 N-Protein, delta N-term, His-tag



SDS-PAGE/Coll.Coomassie



Histogram (of marked lane in gel picture)