

# Recombinant Proteins

## SARS-CoV-2 Recombinant Nucleocapsid Protein, aa1-419 (E. coli-expressed)

Novel coronavirus (SARS-CoV-2/2019-nCoV) nucleocapsid protein (recombinant), amino acids Met1-Ala419, His & T7 tags

Catalog # 100-0590  
100-0591

100 µg  
1000 µg



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

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## Product Description

SARS-CoV-2 Recombinant Nucleocapsid Protein, aa1-419 is expressed in *E. coli* and is one of four structural proteins encoded by the SARS-CoV-2 genome. The Nucleocapsid Protein is transcribed from the viral "N" gene and is the protein that interacts with RNA to form the nucleocapsid. The protein is a homo-oligomer, and both the monomer and the oligomer can interact with RNA. This protein also interacts with the membrane protein (protein M) after infection of the host cell during packaging of the positive-strand viral genome RNA into the ribonucleocapsid during virion assembly. At the amino terminus, SARS-CoV-2 Recombinant Nucleocapsid Protein contains a thrombin site, a T7 tag, and a polyhistidine tag.

## Product Information

**Alternative Names:** Nucleocapsid protein, NC, Protein N, N, N Protein

**Accession Number:** P0DTC9

**Amino Acid Sequence:** MGSSHHHHHHSSGLVPRGSHMASMTGGQQMGRGSEFRTMSDNGPQNQRNAPRITFGGPSDSTGSNQNG ERSGARSKQRRPQGLPNNTASWFTALTQHGKEDLKFPRGQGVPIINTNSSPDDQIGYYRRATRRIRGGDGKMK DLSPRWYFYLLGTGPEAGLPYGANKDGIWVATEGALNTPKDHIGTRNPANNAIIVLQLPQGTTLPKGFYAEGS RGGSQASSRSSSRNSTRNTPGSSRGTSPARMAGNNGDAALALLLLDRLNQLESKMSGKGGQQQQGQTVT KKSAAEASKKPRQKRTATKAYNVTQAFGRRGPEQTQGNFGDQELIRQGTDYKHWPQIAQFAPSASAFFGMSRI GMEVTPSGTWLTYTAAIKLDDKDPNFKDQVILLNKHIDAYKTFPPTPEPKDKKKKKADETQALPQRQKKQQTVTLL PAADLDDFSKQLQQSMSSADSTQA

**Predicted Molecular Mass:** 48.0 kDa

**Species:** Novel human coronavirus (SARS-CoV-2/2019-nCoV)

**Formulation:** Lyophilized from a solution containing Tris-HCl, NaCl, and trehalose, pH 8.0.

**Source:** *E. coli*

## Specifications

**Activity:** Not available

**Purity (SDS-PAGE):** ≥ 90%

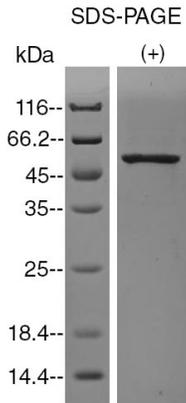
## Preparation and Storage

**Storage:** Store at -20°C to -80°C.

**Stability:** Stable until expiry date (EXP) on label.

**Preparation:** Centrifuge before opening. Reconstitute the product in sterile water to a concentration of 0.1 - 1.0 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. Sterilize by 0.2 µm filtration. Store at 2 - 8°C for up to 1 week.

## Data



SARS-CoV-2 Recombinant Nucleocapsid Protein was resolved with SDS-PAGE under reducing (+) conditions and visualized by Coomassie Blue staining. SARS-CoV-2 Recombinant Nucleocapsid Protein has a predicted molecular mass of 48.0 kDa and an observed band size of ~50 kDa.

## Related Products

For a complete list of recombinant proteins, as well as related products available from STEMCELL Technologies, visit [www.stemcell.com](http://www.stemcell.com) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

- Ahmed SF et al. (2020) Preliminary identification of potential vaccine targets for the COVID-19 coronavirus (SARS-CoV-2) based on SARS-CoV immunological studies. *Viruses* 12(3): 254.
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