

Nucleocapsid Protein from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine Tag, Recombinant from Baculovirus

Catalog No. NR-53797
Sino Biological Catalog No. 40588-V08B

For research use only. Not for use in humans.

Contributor and Manufacturer:

Sino Biological, Wayne, Pennsylvania, USA

Product Description:

A recombinant form of the nucleocapsid (N) protein from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), Wuhan-Hu-1 (GenPept: [YP_009724397](#)) was produced by transfection in insect cells using a baculovirus expression system and purified.^{1,2} NR-53797 contains the full-length SARS-CoV-2 N protein with one mutation, G335A, and features a C-terminal poly-histidine tag.^{1,2} The predicted protein sequence is shown in Figure 1. NR-53797 has a theoretical molecular weight of 47,080 daltons.¹ Representative SDS-PAGE results are shown in Figure 2.

Material Provided:

Each vial of lot LC17AP2020 contains approximately 50 µg of purified recombinant protein lyophilized from sterile 20 mM Tris, pH 8.0, 500 mM NaCl and 10% glycerol.

Note: The previous lots (MF14DE1661, MF14FE0802 and MF14JL0301) were not lyophilized and contained 50 µg of purified recombinant protein in 20 mM Tris, pH 8.0, 500 mM NaCl and 10% glycerol.

Packaging/Storage:

NR-53797 was packaged aseptically in glass vials. The product is provided at ambient temperature and should be stored under sterile conditions at -20°C to -80°C immediately upon arrival.

Reconstitution and Storage of Protein:

Reconstitute with sterile deionized water to 0.25 mg/mL. Reconstituted NR-53797 should be stored at -70°C or colder immediately and used within 3 months. It is recommended that the protein be aliquoted in smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Nucleocapsid Protein from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C Terminal Histidine Tag, Recombinant from Baculovirus, NR-53797.”

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following

publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Lu, Z., Personal Communication.
2. Wu, F., et al. “A New Coronavirus Associated with Human Respiratory Disease in China.” *Nature* 579 (2020): 265-269. PubMed: 32015508.

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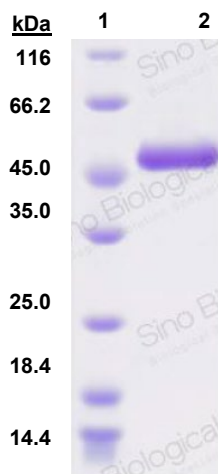
Figure 1: Predicted Protein Sequence

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1  MSDNGPQNQR  NAPRITFGGP  SDSTGSNONG  ERSGARSKQR  RPQGLPNNTA
51  SWFTALTQHG  KEDLKFPRGQ  GVPINTNSSP  DDQIGYYRRA  TRRIRGGDGK
101 MKDLSRWYF  YYLGTGPEAG  LPYGANKDGI  IWVATEGALN  TPKDHIGTRN
151 PANNAIVLQ  LPQGTTLPKG  FYAEGSRGGS  QASSRSSRS  RNSSRNSTPG
201 SSRGTSPARM  AGNGGDAALA  LLLLDRLNQL  ESKMSGKGQQ  QQGQTVTKKS
251 AAEASKKPRQ  KRTATKAYNV  TQAFGRRGPE  QTQGNFGDQE  LIRQGTDYKH
301 WPQIAQFAPS  ASAFFGMSRI  GMEVTPSGTW  LTYTAAIKLD  DKDPNFKDQV
351 ILLNKHIDAY  KTFPPTEPKK  DKKKKADETQ  ALPQRQKKQQ  TVTLLPAADL
401 DDFSKQLQQS  MSSADSTQAA  HHHHHHHHHH
    
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N protein – **Residues 1 to 419** [represents amino acid residues 1 to 419 of the native protein (GenPept: [YP_009724397](http://www.ncbi.nlm.nih.gov/GenPept/YP_009724397))]
 Poly-histidine tag – Residues 421 to 430

Figure 2: Representative SDS-PAGE



Lane 1: MW ladder
 Lane 2: NR-53797