

**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.<sup>1,2</sup> NR-53797 contains the full-length SARS-CoV-2 N protein with one mutation, G335A, and features a C-terminal poly-histidine tag.<sup>1,2</sup> The predicted protein sequence is shown in Figure 1. NR-53797 has a theoretical molecular weight of 47,080 daltons.<sup>1</sup> Representative SDS-PAGE results are shown in Figure 2.<sup>1</sup>

**Material Provided:**

Each vial contains approximately 50 µg of purified recombinant protein in 20 mM Tris, pH 8.0, 500 mM NaCl and 10% glycerol. Note: NR-53797 was not lyophilized. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-53797 was packaged aseptically in cryovials. The product is provided on dry ice and should be stored under sterile conditions at -20°C to -80°C immediately upon arrival. It is recommended that the protein be aliquoted for optimal storage.<sup>1</sup> Freeze-thaw cycles should be avoided.

**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; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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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 SDSTGSNQNG 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 KTFPTEPKK DKKKKADETQ ALPQRQKKQQ TVTLLPAADL
401 DDFSKQLQQS MSSADSTQAA HHHHHHHHHH
    
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N protein – **Residues 1 to 419** (represents amino acid residues 1 to 419)  
 Poly-histidine tag – Residues 421 to 430

Figure 2: Representative SDS-PAGE

