

Nucleocapsid Protein N-Terminal RNA Binding Domain from SARS-Related Coronavirus 2, Wuhan-Hu-1 with N-Terminal Histidine Tag, Recombinant from *Escherichia coli*

Catalog No. NR-53246

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Contributor and Manufacturer:

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Product Description:

A recombinant, truncated form of the nucleocapsid (N) protein N-terminal RNA binding domain from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), Wuhan-Hu-1 (GenPept: [QHD43423](#)) was expressed in *Escherichia coli* and purified by nickel affinity and size exclusion chromatography. NR-53246 contains 127 residues (amino acids 47 to 173) of the SARS-CoV-2 nucleocapsid phosphoprotein, with a tobacco etch virus (TEV)-cleavable N-terminal hexa-histidine tag.¹ The predicted protein sequence is shown in Figure 1. NR-53246 has a theoretical molecular weight of 16,600 daltons.¹

Material Provided:

Each vial contains approximately 200 µL of NR-53246 in 25 mM HEPES (pH 7.0), 500 mM NaCl, 5% glycerol, 2 mM dithiothreitol (DTT) and 0.025% sodium azide. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-53246 was packaged aseptically in cryotubes. The product is provided on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Nucleocapsid Protein N-Terminal RNA Binding Domain from SARS-Related Coronavirus 2, Wuhan-Hu-1 with N-Terminal Histidine Tag, Recombinant from *Escherichia coli*, NR-53246.”

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](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Van Voorhis, W., 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

1 MHHHHHSSG VDLGTENLYF QSNNTASWF TALTQHGKED LKFPRGQGV
51 INTNSSPDDQ IGYRRATRR IRGGDGKMKD LSPRWYFYLL GTGPEAGLPY
101 GANKDGIWV ATEGALNTPK DHIGTRNPAN NAAIVLQLPQ GTTLPKGFYA

TEV-cleavable hexa-histidine-tag – Residues 1 to 22

N protein RNA binding domain – **Residues 24 to 150** (represents amino acid residues 47 to 173)