

# COVID 19 (BA.4) Nucleocapsid Coronavirus Recombinant Protein | COVID-19 recombinant protein

SARS-CoV-2 (BA.4) Nucleocapsid Protein (His Tag)

|                               |                       |                                 |
|-------------------------------|-----------------------|---------------------------------|
| CATALOG #<br><b>AAA258550</b> | HOST<br><b>E Coli</b> | REACTIVITY<br><b>SARS-CoV-2</b> |
|-------------------------------|-----------------------|---------------------------------|

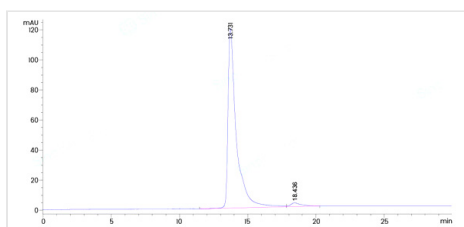
## PRODUCT SYNONYMS

COVID 19 (BA.4) Nucleocapsid Coronavirus; SARS-CoV-2 (BA.4) Nucleocapsid Protein (His Tag); 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Nucleocapsid; Nucleoprotein (NP); (BA.4) Nucleocapsid; COVID-19 recombinant protein

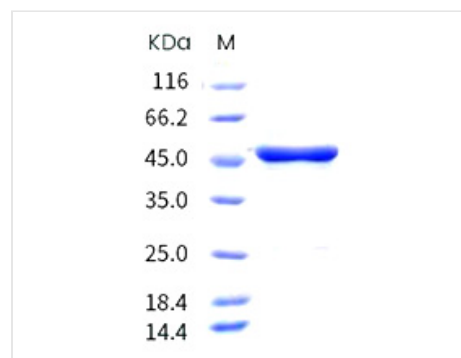
## PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E Coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Reactivity              | SARS-CoV-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Purity/Purification     | >90% as determined by SDS-PAGE. >95% as determined by SEC-HPLC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format             | Lyophilized from sterile 50mM PB, 500mM NaCl, pH 7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                                                                                                                                                                                                                                                                               |
| Sequence                | Met1-Ala41 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Tag                     | N-His                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Predicted N Terminal    | Met                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Protein Construction    | A DNA sequence encoding the SARS-CoV-2 (BA.4) Nucleocapsid (YP_009724397.2, with mutation P13L, ERS31-33del, P151S, R203K, G204R, S413R)(Met1-Ala419) was expressed with a polyhistidine tag at the N-terminus. The mutations were identified in the SARS-CoV-2 variant (known as variant BA.4).                                                                                                                                                                                                                                         |
| Preparation and Storage | Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.<br>In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## IMAGES



Application Data



Application Data

## ADDITIONAL INFORMATION

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for COVID-19 recombinant protein</b> | Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. The coronavirus N protein is required for coronavirus RNA synthesis and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to the formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of the N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a test tool. |
| <b>References</b>                                                   | 1. Van Boheemen S, et al. (2012), MBio. 3(6):e00473-12. Bisht H. et al., 2004, Proc Natl Acad Sci. 101 (17): 6641-6. Li W. et al., 2005, Science. 309 (5742): 1864-8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## NCBI AND UNIPROT INFORMATION

|                                  |                                |
|----------------------------------|--------------------------------|
| <b>NCBI GI #</b>                 | <a href="#">1798174255</a>     |
| <b>NCBI Accession #</b>          | <a href="#">YP_009724397.2</a> |
| <b>NCBI GenBank Nucleotide #</b> | <a href="#">YP_009724397.2</a> |
| <b>Molecular Weight</b>          | 47.08 kDa                      |
| <b>NCBI Official Full Name</b>   | nucleocapsid phosphoprotein    |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://stage.aaabiotech.com/covid-19-ba-4-nucleocapsid-coronavirus-recombinant-protein-e-coli/258550>