

Recombinant SARS-CoV-2 Nucleocapsid Protein

Source

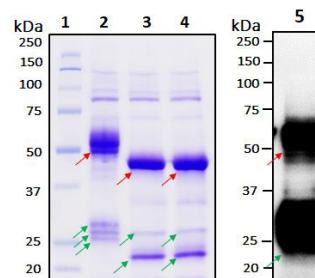
- **Species** SARS-CoV-2
- **Accession Number** QHD43423
- **Expressed Region** Met1-Ala419
- **Synonyms** Nucleocapsid Protein, N Protein

Preparation

- **Expression System** Human embryonic kidney 293 (HEK293) cells
- **Tag** C-terminal his-tag
- **Purification** His-tag affinity purification by immobilized metal ion affinity chromatography (IMAC)
- **Purity** >90%
- **Purity determined** By SDS-PAGE under reducing conditions and visualized by Coomassie blue staining
- **Molecular Weight** Recombinant protein product has a calculated molecular mass of ~47 kDa. Due to the abundant glycosylation, it migrates as approximately ~55 kDa major protein band in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions. The minor small protein bands (25-30 kDa) are likely the cleaved products. See deglycosylation analysis image below.

Protein Specifications

- **Format** Liquid
- **Formulation** Supplied as a 0.2 µm filtered solution in PBS (pH 7.4)
- **Concentration** Lot specific (see the label on the vial), determined by BCA protein assay.
- **SDS-PAGE Image** Deglycosylation analysis of purified recombinant proteins. Purified proteins were untreated (*Lane 2*) or treated with Protein Deglycosylation Kit under native (*Lane 3*) or reducing (*Lane 4*) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one major band at the expected size (47 kDa), thus indicating that the untreated recombinant protein (*Lane 2*) was glycosylated. **Lane 1:** Protein standard ladder (kDa). **Lane 2:** Untreated protein under reducing conditions, shown one ~55 kDa major band (*red arrow*) and 25-30 kDa multiple of minor bands (*green arrows*). This small bands are likely cleavage products. All bands were confirmed by western blotting (*Lane 5*). Other minor large bands (>80 kDa) may be the trace amount of copurified proteins from host cells. **Lane 3:** Treated protein with deglycosylation enzymes under native conditions, shown one 47 kDa major band (*red arrow*) and two minor 22~30 kDa bands (*green arrows*). **Lane 4:** Treated protein with deglycosylation enzymes under reducing conditions, shown one ~47 kDa major band (*red arrow*) and two minor 22~30 kDa bands (*green arrows*). **Lane 5:** Western blotting analysis of Lane 1, shown two major reaction bands (*red and green arrows*).



Shipping

The product is shipped with ice packs.

Storage/Stability

Upon arrival, the protein may be stored for 2 weeks at 4 °C. For long term storage, it is recommended to store at -20 °C or -80 °C in appropriate aliquots. Avoid repeated freeze-thaw cycles.

This product is furnished for **LABORATORY RESEARCH USE ONLY**.
Not for diagnostic or therapeutic use.