

Catalog Number: 230-30164

## 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) likely the cleaved products. See deglycosylation analysis image below.

### Protein Specifications

Formulation	Supplied as a 0.2 um filtered solution in PBS (pH 7.4)
Concentration	Lot specific (see the label on the vial), determined by BCA protein assay
Recommended Applications	Lateral flow, indirect ELISA, sandwich ELISA, glycosylation analysis, antibody generation, hybridoma screening, western blotting, biotin/dye/bead conjugation, binder selection, crystallization, and vaccine development.

### SDS-PAGE Image

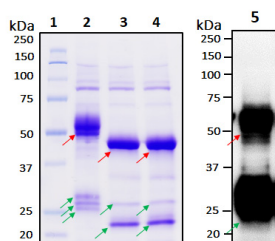


Figure 1. Deglycosylation of purified recombinant proteins. Purified proteins were untreated (Lane 2) or treated with Protein Deglycosylation Kit under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one major band at the 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). These 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 arrow, green arrow).

## Shipping

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.