**General Information**

**Gene Name Synonym:**
coronavirus NP; coronavirus Nucleocapsid; coronavirus Nucleoprotein; cov np; ncv NP; NCP-CoV Nucleocapsid; novel coronavirus NP; novel coronavirus Nucleocapsid; novel coronavirus Nucleoprotein; np; nucleocapsid; Nucleoprotein

**Protein Construction:**
A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (YP_009724397.2) (Met1-Ala419(335Gly/Ala)) was expressed with a polyhistidine tag at the N-terminus. The purified protein was biotinylated in vitro.

**Source:** 2019-nCoV

**Expression Host:** E. coli

**QC Testing**

**Purity:** > 90 % as determined by SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Predicted N terminal:** Met

**Molecular Mass:**
The recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His tag) consists of 426 amino acids and predicts a molecular mass of 46.61 kDa.

**Formulation:**
Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

**Usage Guide**

**Stability & Storage:**
Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

**Reconstitution:**
Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**

**Protein Description**
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. Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is a most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to 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 N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

**References**


Manufactured By Sino Biological Inc.
Tel: 215-583-7898 (US); +86-400-890-9989(Global)  
[http://www.sinobiological.com](http://www.sinobiological.com)