

PRODUCT INFORMATION

Target	Nucleocapsid
Synonyms	Nucleocapsid protein;NP;Protein N;Delta (B.1.617.2)
Description	Recombinant SARS-CoV-2 Nucleocapsid (D63G, R203M, D377Y) protein with C-terminal 6×His tag
Delivery	In Stock
Uniprot ID	P0DTC9
Expression Host	HEK293
Tag	C-6×His Tag
Molecular Characterization	Nucleocapsid (D63G, R203M, D377Y)(Met1-Ala419) 6×His tag
Molecular Weight	The protein has a predicted molecular mass of 46.6 kDa after removal of the signal peptide. The apparent molecular mass of Nucleocapsid (D63G, R203M, D377Y)-His is approximately 55-70 kDa due to glycosylation.
Purity	The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Storage&Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
Background	Coronavirus contain most of nucleocapsid protein. Coronavirus nucleoproteins (N proteins) 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 nucleolus is the site of ribosome biogenesis and sequesters cell cycle regulatory complexes. Two of the major components of the nucleolus are fibrillarin and nucleolin. These proteins are involved in nucleolar assembly and ribosome biogenesis and act as chaperones for the import of proteins into the nucleolus. Regarding of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is a tool for diagnostic.
Usage	Research use only
Conjugate	Unconjugated



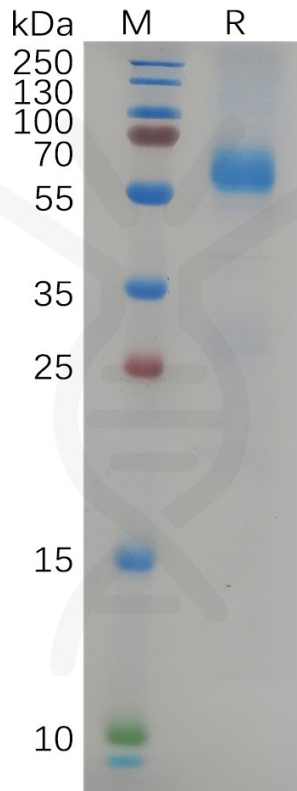


Figure 1. SARS-CoV-2 Nucleocapsid (D63G, R203M, D377Y) Protein, His Tag on SDS-PAGE under reducing condition.

