

## PRODUCT INFORMATION

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| <b>Target</b>                           | Nucleocapsid   |
| <b>Synonyms</b>                         | Nucleocapsid protein;NP;Protein N;Omicron (B.1.1.529)  |
| <b>Description</b>                      | Recombinant SARS-CoV-2 Nucleocapsid (P13L,E31del,R32del,S33del,R203K,G204R) protein with C-terminal 6xHis tag  |
| <b>Delivery</b>                         | In Stock   |
| <b>Uniprot ID</b>                       | P0DTC9   |
| <b>Expression Host</b>                  | HEK293   |
| <b>Tag</b>                              | C-6xHis Tag  |
| <b>Molecular Characterization</b>       | Nucleocapsid (P13L, E31del, R32del, S33del, R203K, G204R)(Met1-Ala419) 6xHis tag   |
| <b>Molecular Weight</b>                 | The protein has a predicted molecular mass of 46.3 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.  |
| <b>Purity</b>                           | The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.   |
| <b>Formulation &amp; Reconstitution</b> | 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.   |
| <b>Storage&amp;Shipping</b>             | 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.  |
| <b>Background</b>                       | 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. |
| <b>Usage</b>                            | Research use only  |
| <b>Conjugate</b>                        | Unconjugated   |



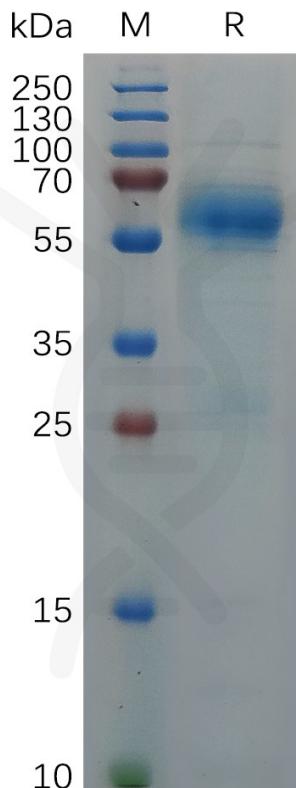


Figure 1. SARS-CoV-2 Nucleocapsid (P13L, E31del, R32del, S33del, R203K, G204R) Protein, His Tag on SDS-PAGE under reducing condition.

