

## Recombinant SARS-CoV-2 N Protein, His-tagged

Cat. No. N-44S Lot. No. (See product label)

### SPECIFICATION

|                         |   |
|-------------------------|---|
| <b>Product Overview</b> | Recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein is produced by our E.coli expression system and the target gene encoding Met1-Ala419 is expressed with a 6His tag at the N-terminus.  |
| <b>Species</b>          | SARS-CoV-2  |
| <b>Source</b>           | E.coli  |
| <b>Description</b>      | 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. N protein packages the positive strand viral genome RNA into a helical ribonucleocapsid (RNP) and plays a fundamental role during virion assembly through its interactions with the viral genome and membrane protein M. Plays an important role in enhancing the efficiency of subgenomic viral RNA transcription as well as viral replication. Because of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool. |
| <b>Form</b>             | Supplied as a 0.2 uM filtered solution of 20 mM Tris-HCl, 300 mM NaCl, 1 mM EDTA, pH 8.0.   |
| <b>Molecular Mass</b>   | Predicted Molecular Weight: 49.4kDa<br>Apparent Molecular Weight: 50-60kDa under reducing condition.  |
| <b>AA Sequence</b>      | Met1-Ala419   |

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|                          |   |
|--------------------------|---|
| <b>Endotoxin</b>         | Less than 0.1 ng/ug (1 EU/ug).  |
| <b>Purity</b>            | >95%  |
| <b>Applications</b>      | Immunogen, calibrator or standard.  |
| <b>Storage</b>           | Reconstituted protein solution should be stored at ≤ -20 centigrade.  |
| <b>Reconstitution</b>    | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Please aliquot the solution to minimize freeze-thaw cycles. It is not recommended to dilute a concentration less than 100 µg/ml. |
| <b>Quality Statement</b> | Purity: Greater than 95% as determined by reducing SDS-PAGE.  |
| <b>Shipping</b>          | The product is shipped on dry ice pack.   |

## GENE INFORMATION

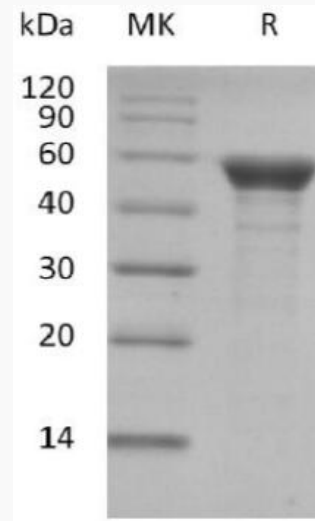
|                        |   |
|------------------------|---|
| <b>Gene Name</b>       | N nucleocapsid phosphoprotein [ Severe acute respiratory syndrome coronavirus 2 ]                         |
| <b>Official Symbol</b> | N   |
| <b>Synonyms</b>        | 2019-nCoV coronavirus NP Protein; 2019-nCoV np Protein; 2019-nCoV novel coronavirus Nucleoprotein Protein |
| <b>Gene ID</b>         | 43740575  |
| <b>Protein Refseq</b>  | YP_009724397.2  |
| <b>UniProt ID</b>      | P0DTC9  |

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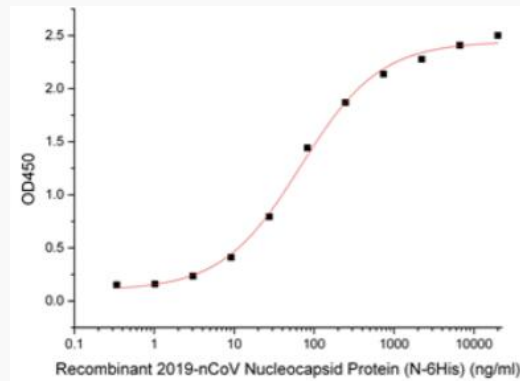
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**SDS-PAGE**



Purity: Greater than 95% as determined by reducing SDS-PAGE.

**Bioactivity**



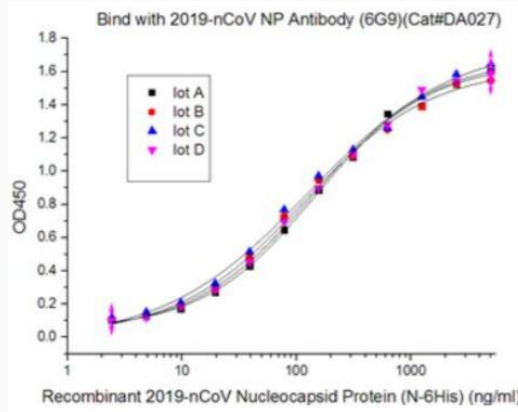
Immobilized SARS-CoV-2 (2019-nCoV) NP Antibody (6G9) at 5µg/ml (100 µl/well) showing the binding to SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein-His. The ED50 of SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein-His is 68 ng/ml.

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**Bioactivity**



Batch stability is confirmed by binding ability with anti-2019-nCoV NP Antibody(6G9).

The result showed that the batch variation is no significant differences among these samples.

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