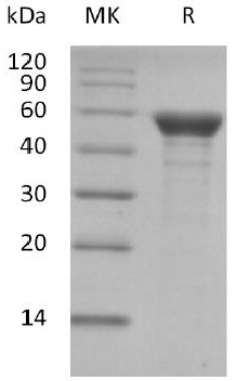
Recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein

Catalog No: DRA31

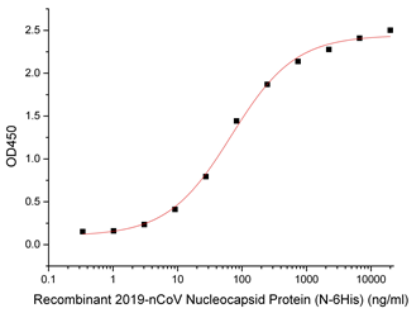
Description	Recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein is produced by our *E.coli* expression system and the target gene encoding Met1-Ala419 is expressed with a 6His tag at the N-terminus.
Source	*E.coli*
Alternative Name	2019-nCoV coronavirus NP Protein; 2019-nCoV np Protein; 2019-nCoV novel coronavirus Nucleoprotein Protein
Accession	QHD43423.2
Predicted Molecular Weight	49.4kDa
AP Molecular Weight	50-60kDa under reducing condition
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE.
Formulation	Supplied as a 0.2 μM filtered solution of 20 mM Tris-HCl, 300 mM NaCl, 1mM EDTA, pH 8.0
Reconstitution	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.
Shipping	The product is shipped on dry ice pack
Storage	Reconstituted protein solution should be stored at ≤ -20°C
Application	Immunogen, calibrator or standard.
Background	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.

SDS-PAGE



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

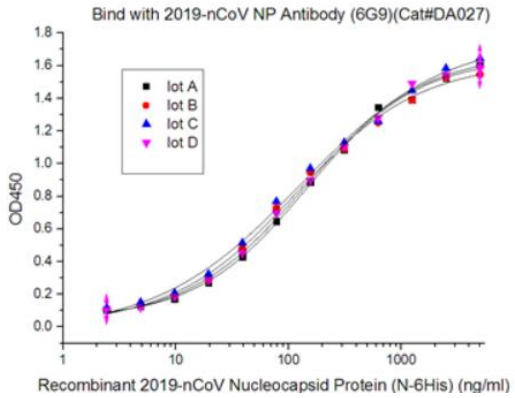
Bioactivity



Immobilized SARS-CoV-2 (2019-nCoV) NP Antibody (6G9)(Cat#DA027) at 5μg/ml (100 μl/well) showing the binding to SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein-His (Cat#DRA31).

The ED50 of SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein-His (Cat#DRA31) is 68 ng/ml.

Batch Stability



Batch stability is confirmed by binding ability with and-2019-nCoV NP Antibody(6G9)(Cat#DA027).

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