## **w** abeomics

## 12-8454: Anti-SARS-CoV-2 Nucleocapsid (N) (Clone NP2-F6) Purified No Carrier Protein

Clonality :	Monoclonal
Clone Name :	NP2-F6
Application :	ELISA
Alternative Name :	COV2-NP2-F6, SARS-CoV-2 Nucleocapsid, SARS-CoV-2 Nucleoprotein, Protein N, SARS-CoV N Protein
Isotype :	Human IgG1

## Description

Specificity: Anti-SARS-CoV-2 Nucleocapsid, clone NP2-F6, specifically targets an epitope on the SARS-CoV-2 nucleocapsid protein.

Antigen Distribution: The nucleocapsid protein is expressed in the internal nucleocapsid of SARS-CoV-2.

Background: Coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). SARS-CoV-2 belongs to the Coronaviridae family, and its single-stranded, positive-sense RNA genome shares 79.6% identity with SARS-CoV1. The spike (S), envelope (E), membrane (M), and nucleocapsid proteins (N) are four essential structural proteins of SARS-CoV-22. The 46 kDa N protein is highly conserved and shares 90% homology with SARS-CoV3. Similar to SARS-CoV, SARS-CoV-2 has an N-terminal (NTD) and C-terminal domain (CTD), linked by a linker region. The NTD binds to RNA, while the CTD self-oligomerizes4,5, aiding viral genome packaging into a helical ribonucleoprotein complex6. The N protein also participates in viral transcription, replication, and modulation of cell signaling pathways7,8. Some vaccine and diagnostic assays9 have focused on the N protein as it is highly expressed during infection and activates antibodies3,10 and memory T cells11,12, found in convalescent sera. The N-protein also evades the innate immune system by inhibiting RNAi13, identifying it as a potential therapeutic target.

## **Product Info** Amount : 100 µg / 500 µg Purity :>=90% monomer by analytical SEC and SDS-Page Preparation : Recombinant antibodies are manufactured in an animal free facility using only in **Purification :** vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates. Concentration:>=1.0 mg/ml Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, **Content :** potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration. This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term Storage condition : storage, aseptically aliquot in working volumes without diluting and store at <=-70°C.?Avoid Repeated Freeze Thaw Cycles.





Figure 1

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