

## 10-10033: Monoclonal Antibody to SARS-CoV-2 nucleocapsid Protein (Clone: ABM3F2.1C1)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ABM3F2.1C1
<b>Application :</b>	ELISA, WB
<b>Gene :</b>	N
<b>Gene ID :</b>	43740575
<b>Uniprot ID :</b>	P0DTC9
<b>Format :</b>	Purified
<b>Isotype :</b>	Mouse IgG2b, Kappa
<b>Immunogen Information :</b>	Full length recombinant SARS-CoV-2 nucleocapsid protein was used as the immunogen for this antibody.

### Description

The structural nucleocapsid (N) protein of nCoV/SARS-CoV-2/COVID-19 is a predicted 46 kDa phosphoprotein having 419 amino acid residues. A short Serine rich stretch and a recognized nuclear localization signal are the unique features of the nucleocapsid protein of nCoV/SARS-CoV-2/COVID-19, which seems to have a little homology with the proteins of other members of this large corona virus family. These features also suggest the involvement of nucleocapsid protein of nCoV/SARS-CoV-2/COVID-19 in different stages of viral lifecycle. The protein has multifaceted activities including packing of the nCoV/SARS-CoV-2/COVID-19 viral genome into a helical ribonucleocapsid (RNP) and playing an important role in viral self-assembly causing nCoV/SARS-CoV-2/COVID-19. The nucleocapsid protein of nCoV/SARS-CoV-2/COVID-19 also forms dimer in the cell by self-association with the help of interactive C terminal domain.

**“This product was developed using BIRAC financial assistance project reference no. BT/COVID0062/02/20”**

### Product Info

<b>Amount :</b>	25 µg / 100 µg
<b>Purification :</b>	Protein G Chromatography
<b>Content :</b>	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Recommended dilutions: WB: 0.1-1 µg/ml, ELISA: 1 µg/ml. However, this need to be optimized based on the research applications.

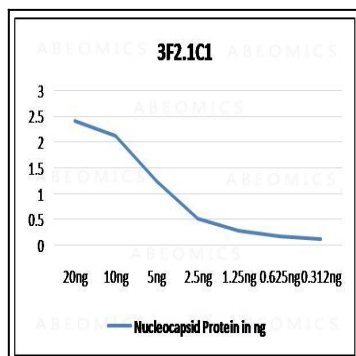


Figure-1: An indirect ELISA is carried out by coating nucleocapsid protein in serial dilution from 20 ng to 0.312 ng and using 100 ng of purified monoclonal antibodies 3F2.1C1. Peroxidase conjugated Goat-Anti mouse antibody was used at 1:5000 dilution.

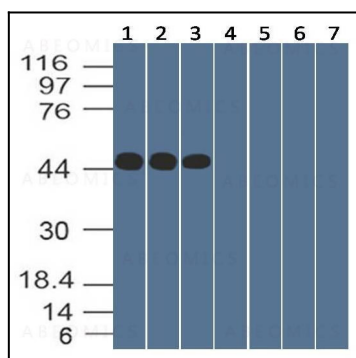


Figure-2: Western Blot analysis: The purified antibodies 3F2.1C1 was tested on Nucleocapsid Recombinant protein at different concentrations, 0.1 (lane 1), 0.5 (lane 2), and 1.0 µg/ml (lane 3), (4) RBD protein, (5) unrelated protein 1, (6) unrelated protein 2, (7) unrelated protein 3, to detect the specific binding. 25 ng of proteins was loaded per lane.