

## 10-10032: Monoclonal Antibody to SARS-CoV-2 Nucleocapsid (Clone: ABM1F11.1E1)

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|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | ABM1F11.1E1  |
| <b>Application :</b>           | ELISA, WB  |
| <b>Reactivity :</b>            | Human  |
| <b>Gene :</b>                  | N  |
| <b>Gene ID :</b>               | 43740575   |
| <b>Uniprot ID :</b>            | P0DTC9   |
| <b>Format :</b>                | Purified   |
| <b>Isotype :</b>               | Mouse IgG1, 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.

### 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.

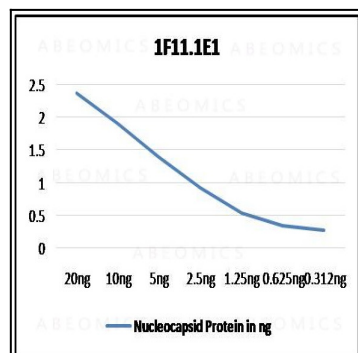


Figure-1: An indirect ELISA is carried out by coating nucleocapsid protein in serial dilution from 20 ng to 0.312 ng and using 100 ng of purified monoclonal antibodies 1F11.1E1. Peroxidase conjugated Goat-Anti mouse antibody was used at 1:5000 dilution.

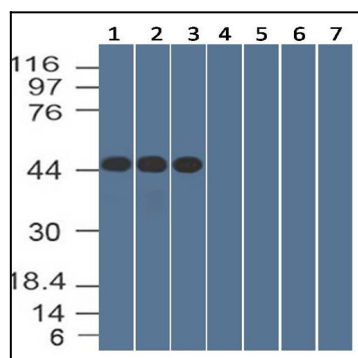


Figure-2: Western Blot analysis: The purified antibodies 1F11.1E1 was tested on Nucleocapsid Recombinant protein at different concentrations, 0.1 (lane 1), 0.5 (lane 2), and 1.0  $\mu$ g/ml (lane 3), (4) RBD protein, (5)unrelated protein 1, (6) unrelated protein 2, (7) unrelated protein 3, to detect the specific binding. 25 ng of proteins was loaded per lane.

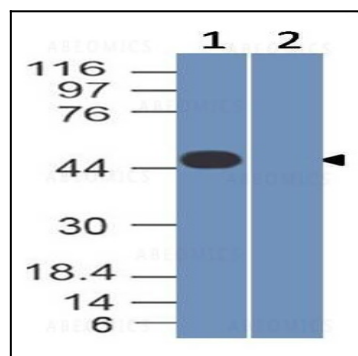


Figure-3: Western Blot analysis of SARS-CoV-2 Nucleocapsid Antibody: Anti- SARS-CoV-2 Nucleocapsid Antibody (Clone: ABM1F11.1E1) was used at 2  $\mu$ g/ml on (1) SARS-CoV-2 virus infected Vero Cell lysate and (2) Mock infected lysate.