

11-2003: Coronavirus (COVID-19) Nucleocapsid Antibody

Clonality : Polyclonal

Application : ELISA, WB

Format : Purified

Isotype : Rabbit IgG

Immunogen Information : A partial length recombinant coronavirus Nucleocapsid protein (amino acids 250-410) 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

Amount : 25 µg / 100 µg

Purification : Protein A Chromatography

Content : 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.

Storage condition : 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: 0.5-1 µg/ml. However, this need to be optimized based on the research applications.

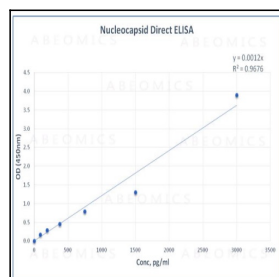


Figure-1: Wells of a 96-microtiter plate were coated with 4ug/ml of SARS-Cov-2/nCov/COVID-19 Nucleocapsid recombinant protein (21-1003). The binding was detected by addition of different dilution of 11-2003 polyclonal antibody. The reactivity was detected by a HRP-conjugated goat-anti-rabbit polyclonal antibody.

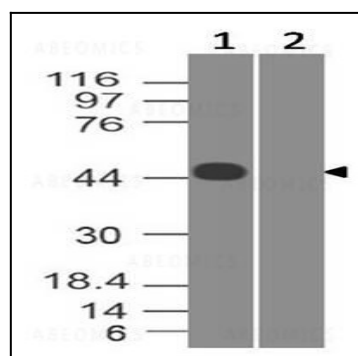


Figure-2: Western Blot analysis of SARS-CoV-2 Nucleocapsid Protein: Anti- SARS-CoV-2 Nucleocapsid Protein (11-2003) was used at 2 μ g/ml on (1) SARS-CoV-2 virus infected Vero Cell lysate and (2) Mock infected lysate.

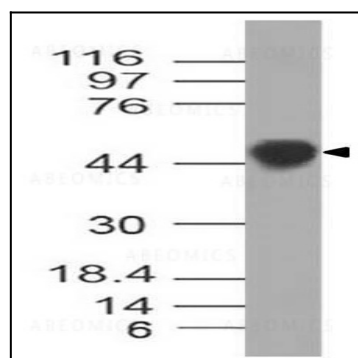


Figure-3: Western Blot analysis of Nucleocapsid antibody: Anti- Nucleocapsid antibody (SARS-CoV-2) was used at 4 μ g/ml on recombinant Nucleocapsid Protein (21-1003).