Data Sheet (Cat.No.TMAY-02968)

Anti-SARS-CoV-2 Nucleocapsid Antibody (2V508)

Product Details

Ig Type:	Rabbit IgG
Conjugation:	Unconjugated
Clone:	2V508
Purification:	Protein A

Applications

Verified Activity:	1. Flow cytometric analysis of SARS-COV-2 Nucleocapsid overexpressed HEK293 Cells were stained with purified anti-SARS-COV-2 Nucleocapsid Rabbit MAb, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells. (Validation Experiment) 2. Anti-SARS-CoV-2 (2019-nCoV) Nucleocapsid rabbit monoclonal antibody at 1:5000 dilution. -Lane A: SARS-COV-2 Nucleocapsid (YP_009724397.2, WT) overexpressed HEK293 Whole Cell Lysate. -Lane B: HEK293 Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. -Developed using the ECL technique. -Performed under reducing conditions. (Validation Experiment) 3. SARS-COV-2 Nucleocapsid was immunoprecipitated using: -Lane A:0.5 mg SARS-COV-2 Nucleocapsid (YP_009724397.2, WT) overexpressed HEK293 Whole Cell Lysate. -Lane B:0.5 mg HEK293 Whole Cell Lysate. -4 µL anti-SARS-COV-2 Nucleocapsid rabbit polyclonal antibody and 60 µg of Immunomagnetic beads Protein A/G. -Primary antibody: -anti-SARS-COV-2 Nucleocapsid rabbit polyclonal antibody, at 1:100 dilution. -Secondary antibody: -Clean-Blot IP Detection Reagent (HRP) at 1:1000 dilution. -Developed using the ECL technique. -Performed under reducing conditions. (Validation Experiment)
Application:	ELISA,ELISA(Cap),FCM,IP,WB
Recommended	WB: 1:5000-1:20000; ELISA: 1:5000-1:10000; FCM: 1:25-1:100; IP: 1-5 µL/mg of lysate; ELISA (Cap): 1:250-1:2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (TMPY-05664)

Antigen Species: SARS-CoV-2

Research Background

Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. The coronavirus N protein is required for coronavirus RNA synthesis and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to the formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of the N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

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