

RM17574

Leader in Biomolecular Solutions for Life Science



Rabbit anti-SARS-CoV-2 Nucleocapsid Protein mAb (CAP)

Catalog No.: RM17574

Basic Information

Catagory

Matched Antibody Pair

Applications

ELISA

Product Information

Ig Type

Rabbit IgG

Purification

Affinity purification

Endotoxin Level

Storage

Store unopened kit at 2-8 °C for 1 week. If more than one week, please keep the components of the kit according to the instructions. Do not use past kit expiration date.

Avoid repeated freeze-thaw cycles.

Formulation

Supplied as a 0.2um filtered solution in PBS with 0.1% BSA, pH 7.4.

Contact



www.abclonal.com

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. Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is a most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to 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 N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

Immunogen Information

Immunogen

HK293 derived SARS-COV-2 Nucleocapsid
 Ser2-Ala419
 Accession #YP_009724397.2

Cross-Reactivity

Has cross-reactivity in ELISA with
 SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (Cat# RP01281)
 No cross-reactivity in ELISA with
 MERS-CoV Nucleoprotein protein
 HCoV-229E Nucleoprotein protein

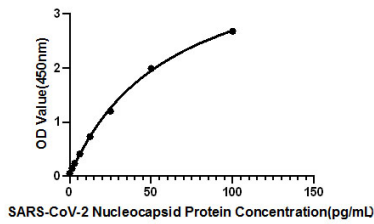
Assay Applications

SARS-COV-2 Nucleocapsid Sandwich Immunoassay

	Recommended Concentration	Sample
ELISA Capture	1-4ug/mL	Rabbit anti-SARS-CoV-2 Nucleocapsid Protein mAb(CAP)(Cat. No. RM17574)
ELISA Detection	0.05-0.2ug/mL	Rabbit anti-SARS-CoV-2 Nucleocapsid Protein mAb(DET)(Cat. No. RM17575)
Standard	1.56-100pg/mL	Recombinant SARS-COV-2 Nucleocapsid Protein with His tag(Cat. No. RP01264)

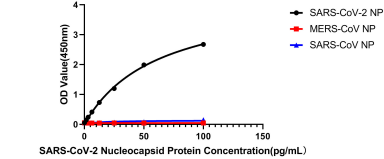
Validation Data

Detection of SARS-CoV-2 Nucleocapsid Protein by ELISA

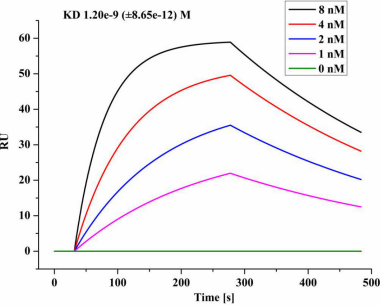


This standard curve is only for demonstration purposes. A standard curve should be generated for each assay.

Species specific binding to NP by Anti-SARS-CoV-2 NP antibody



No cross-reactivity in ELISA with MERS-CoV Nucleoprotein protein and SARS Coronavirus Nucleocapsid.



Cat. No. RM17574, captured on COOH chip can bind AB1 with an affinity constant of 1.20nM as determined in a LSPR assay .