

PRODUCT INFORMATION

SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Monoclonal Antibody

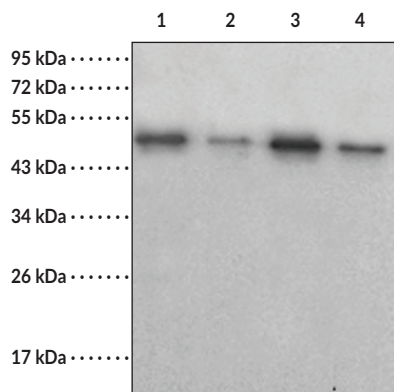
(Clone 005)

Item No. 31428

Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-purified monoclonal antibody.
Synonyms:	SARS-CoV/SARS-CoV-2 NP, SARS-CoV/SARS-CoV-2 Nucleoprotein, Severe Acute Respiratory Syndrome Coronavirus/Severe Acute Respiratory Syndrome Coronavirus 2 Nucleocapsid Protein
Immunogen:	Recombinant SARS-CoV nucleocapsid protein
Species Reactivity:	(+) SARS-CoV, SARS-CoV-2; (-) MERS-CoV, HCoV-229E, HCoV-NL63, HCoV-HKU1, HCoV-OC43
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered PBS
Clone:	Monoclonal Mouse IgG1 Clone 005
Host:	Mouse
Isotype:	IgG
Applications:	ELISA, Western blot (WB); the recommended starting dilution for ELISA is 1:1,000-1:2,000 and 1:1,000-1:5,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: SARS-CoV/SARS-CoV-2 Nucleocapsid Protein (30 ng)
Lane 2: SARS-CoV/SARS-CoV-2 Nucleocapsid Protein (5 ng)
Lane 3: SARS-CoV/SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (30 ng)
Lane 4: SARS-CoV/SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (5 ng)

WB of SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Monoclonal Antibody (Clone 005) at 1:1,000 dilution.

WARNING
 THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
 This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
 Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Severe acute respiratory syndrome coronavirus (SARS-CoV) and SARS-CoV-2 nucleocapsid proteins are encoded by the *N* gene in SARS-CoV and SARS-CoV-2 RNA.^{1,2} SARS-CoV and SARS-CoV-2 are members of the *Betacoronavirus* genus of viruses that have approximately 79% sequence identity and share 27 T cell epitopes in common.³⁻⁵ The SARS-CoV-2 nucleocapsid protein has greater than 90% similarity to the SARS-CoV nucleocapsid protein and contains two unique B cell epitopes and two T cell epitopes that are structurally stable, non-allergenic, and induce production of IFN- γ .^{2,5} SARS-CoV and SARS-CoV-2 nucleocapsid proteins package the viral RNA into a helical ribonucleoprotein complex (RNP), which is a template for viral replication, and are integral for viral self-assembly and involved in regulation of the host cell cycle.^{2,6} SARS-CoV and SARS-CoV-2 are the causative agents of SARS and COVID-19, respectively, both of which are primarily respiratory illnesses characterized by fever, cough, and shortness of breath that can lead to life-threatening complications.^{4,7,8} Cayman's SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Monoclonal Antibody can be used for ELISA and Western blot (WB; reducing conditions) applications.

References

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