

PRODUCT INFORMATION

SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Rabbit Monoclonal Antibody (Clone 0006-1)

Item No. 33629

Overview and Properties

Contents:	This vial contains 100 µl of protein A-purified recombinant 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-2 nucleocapsid protein
Species Reactivity:	(+) SARS-CoV, SARS-CoV-2; (-) MERS-CoV, HCoV-229E, HCoV-NL63, HCoV-HKU1 (isolate N5), HCoV-OC43
MW:	45.6 kDa
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	0006-1
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA and ELISA (detection); the recommended starting dilution is 1:5,000-1:10,000 for ELISA and 1:1,000-1:10,000 for ELISA (detection). Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Description

The nucleocapsid proteins of severe acute respiratory syndrome coronavirus (SARS-CoV) and SARS-CoV-2 are viral proteins 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 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 Rabbit Monoclonal Antibody (Clone 0006-1) can be used for ELISA and ELISA (detection) applications. This recombinant antibody recognizes nucleocapsid protein at 45.6 kDa from SARS-CoV and SARS-CoV-2.

References

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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.

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