

# PRODUCT INFORMATION

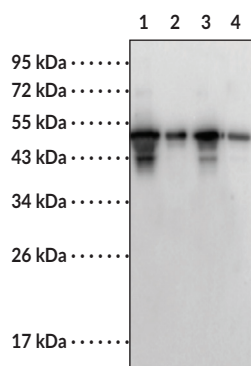


## SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Polyclonal Antibody Item No. 31429

### Overview and Properties

<b>Contents:</b>	This vial contains 50 or 100 µl of protein A-purified polyclonal antibody.
<b>Synonyms:</b>	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
<b>Immunogen:</b>	Recombinant SARS-CoV nucleocapsid protein
<b>Species Reactivity:</b>	(+) SARS-CoV, SARS-CoV-2
<b>Uniprot No.:</b>	P59595
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	0.2 µm filtered solution in PBS
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA and Western blot (WB); the recommended starting dilution for ELISA is 1:5,000-1:10,000 and 1:1,000-1:5,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



SARS-CoV/SARS-CoV-2 Nucleocapsid Protein  
Polyclonal Antibody at 1:2,000 dilution.

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

#### Secondary

A goat anti-rabbit IgG (H+L) conjugated to HRP antibody was used as the secondary antibody at 1:10,000 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  
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CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

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## Description

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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.<sup>1,2</sup> 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.<sup>3-5</sup> 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- $\gamma$ .<sup>2,5</sup> 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.<sup>2,6</sup> 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.<sup>4,7,8</sup> Cayman's SARS-CoV/SARS-CoV-2 Nucleocapsid Protein Polyclonal Antibody can be used for ELISA and Western blot (WB) applications.

## References

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