# .-online.com antibodies

Datasheet for ABIN6952544 anti-SARS-Coronavirus Nucleocapsid Protein (SARS-CoV N) antibody

14	Images
14	Images

Publications

13



## Overview

Quantity:	500 µg
Target:	SARS-Coronavirus Nucleocapsid Protein (SARS-CoV N)
Reactivity:	SARS Coronavirus (SARS-CoV), SARS Coronavirus-2 (SARS-CoV-2)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	Un-conjugated
Application:	ELISA, Western Blotting (WB), Immunofluorescence (IF), Flow Cytometry (FACS), Fluorescence in situ hybridization (FISH), Immunohistochemistry (IHC)

## Product Details

Immunogen:	This protein A purified antibody was prepared from whole rabbit serum produced by repeated
	immunizations with a purified recombinant protein corresponding to full length SARS
	Coronavirus Nucleocapsid protein. Lifesensors Inc. prepared the Nucleocapsid protein as
	follows: SUMO-Nucleocapsid fusion was expressed in E.coli in LB medium and purified using
	using Ni-NTA resin (Qiagen) affinity chromatography. After the fusion was cleaved by the SUMO
	Protease (LifeSensors), the SUMO tag and protease were subtracted from the nucleocapsid
	using MAC and the nucleocapsid was finally purified using Cation Exchange Chromatography
	with the Macro-Prep High S resin (BioRad) and size exclusion chromatography.
	Immunogentype:Recombinant
lsotype:	lgG
Specificity:	Detects the Nucleocapsid (N), Omicron, and BA.2 sub-variant.
Cross-Reactivity (Details):	BLAST analysis was used to suggest reactivity with related Coronavirus proteins. Cross

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/5 | Product datasheet for ABIN6952544 | 01/12/2024 | Copyright antibodies-online. All rights reserved.

Product Details	
	reactivity with homologues from other sources has not been determined.
Predicted Reactivity:	Predicted reactivity based on immunogen sequence: SARS-CoV2 Nucleocapsid protein: (homology 90%)
Purification:	This protein A purified antibody is directed against SARS Coronavirus Nucleocapsid (N) protein. The product was purified from monospecific antiserum by protein A affinity purification.
Target Details	
Target:	SARS-Coronavirus Nucleocapsid Protein (SARS-CoV N)
Alternative Name:	Sars Nucleocapsid Protein (SARS-CoV N Products)
Target Type:	Viral Protein
Background:	The coronavirus nucleocapsid protein is the major structural component of virions that associates with genomic RNA to form a long, flexible, helical nucleocapsid. Sequence comparison of the N genes of five strains of the coronavirus mouse hepatitis virus suggests a three-domain structure for the nucleocapsid protein. Synonyms: N antibody, N structural protein antibody, NC antibody, Nucleocapsid protein antibody, Nucleoprotein antibody, SARS coronavirus N protein antibody, SARS CoV antibody, SARSCoV antibody, Severe acute respiratory syndrome antibody
Gene ID:	1489678, 30173007
UniProt:	P59595

## Application Details

Application Notes:	ELISA : 1:10,000 - 1:50,000
	IF Microscopy : User Optimized
	Flow Cytometry : User Optimized
	Western Blot : 1:2,000 - 1:10,000
	Immunohistochemistry: 1:100-1:6000
	This protein A purified antibody has been tested for use in ELISA, western blot,
	Immunohistochemistry, Immunofluorescence, and lateral flow. Specific conditions for reactivity
	should be optimized by the end user. Expect a band approximately 46 kDa in size
	corresponding to SARS Nucleocapsid (N) protein by western blotting in the appropriate cell
	lysate or extract. ELISA and lateral flow format has been used to detect virus in extracts from
	nasal and throat swabs and saliva. IF has been used to determine the presence or absence of

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/5 | Product datasheet for ABIN6952544 | 01/12/2024 | Copyright antibodies-online. All rights reserved.

## Application Details

ntering cells especially when anti-viral drugs are applied. IHC studies have been
ned on biopsies, included retrospective studies on cadaver tissues after formalin fixation
raffin embedding, detecting the coronavirus in lung, liver, bile duct, and placenta tissue.
er studies have shown this antibody has the ability to neutralize the virus and thereby
t cells from the uptake of live virus. Others have demonstrated the utility of the antibody
cytometry studies.
a band approximately 46 kDa in size corresponding to SARS Nucleocapsid (N) protein
tern blotting in the appropriate cell lysate or extract.
search Use only
lized
e with deionized water (or equivalent)
/mL
0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
(w/v) Sodium Azide
n azide
oduct contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which
be handled by trained staff only.
ial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C
w. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after
ng at room temperature. This product is stable for several weeks at 4° C as an undiluted
Dilute only prior to immediate use.
en, Koumakpayi, Babuadze, Baz, Ndiaye, Faye, Diagne, Dia, Naghibosadat, McGeer,
aka, Moukandja, Ndidi, Tauil, Lekana-Douki, Loucoubar, Faye, Sall, Magalhães, Weis,

Kozak, Kobinger et al.: "Cross-reactive immunity against SARS-CoV-2 N protein in Central and West Africa precedes the COVID-19 pandemic. ..." in: **Scientific reports**, Vol. 12, Issue 1, pp. 12962, (2022) (PubMed).

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 3/5 | Product datasheet for ABIN6952544 | 01/12/2024 | Copyright antibodies-online. All rights reserved. Fattori, Cribier, Chenard, Mitcov, Mayeur, Weingertner: "Cutaneous manifestations in patients with coronavirus disease 2019: clinical and histological findings." in: **Human pathology**, Vol. 107 , pp. 39-45, (2021) (PubMed).

Cervia, Nilsson, Zurbuchen, Valaperti, Schreiner, Wolfensberger, Raeber, Adamo, Weigang, Emmenegger, Hasler, Bosshard, De Cecco, Bächli, Rudiger, Stüssi-Helbling, Huber, Zinkernagel, Schaer, Aguzzi et al.: "Systemic and mucosal antibody responses specific to SARS-CoV-2 during mild versus severe COVID-19. ..." in: **The Journal of allergy and clinical immunology**, Vol. 147, Issue 2, pp. 545-557.e9, (2021) (PubMed).

Zhu, Feng, Hu, Wang, Yu, Zhu, Xu, Cai, Sun, Han, Ye, Qu, Ding, Huang, Chen, Xu, Xie, Cai, Yuan, Zhang: "A genome-wide CRISPR screen identifies host factors that regulate SARS-CoV-2 entry." in: **Nature communications**, Vol. 12, Issue 1, pp. 961, (2021) (PubMed).

Hekman, Hume, Goel, Abo, Huang, Blum, Werder, Suder, Paul, Phanse, Youssef, Alysandratos, Padhorny, Ojha, Mora-Martin, Kretov, Ash, Verma, Zhao, Patten, Villacorta-Martin, Bolzan, Perea-Resa, Bullitt et al.: "Actionable Cytopathogenic Host Responses of Human Alveolar Type 2 Cells to SARS-CoV-2. ..." in: **Molecular cell**, Vol. 80, Issue 6, pp. 1104-1122.e9, (2021) (PubMed).

There are more publications referencing this product on: Product page

### Images



#### Multiplex Immunohistochemistry

**Image 1.** Immunofluorescence of SARS-CoV-2 infection in FFPE cell pellets from in vitro cultured human lung cells infected with SARS-CoV-2. Costaining with anti-SARS-CoV-2 Nucleocapsid Protein antibody ABIN6952544 (red) and anti-SARS-CoV-2 Spike S1 antibody RBD antibody ABIN6952546 (green). Image provided by Akoya Biosciences.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 4/5 | Product datasheet for ABIN6952544 | 01/12/2024 | Copyright antibodies-online. All rights reserved. SARS-CoV-2 N

Mock

nfected



E-cadherin

DAPI

Merge

#### Immunofluorescence

**Image 2.** This immunofluorescence microscopy image shows localization of SARS-CoV-2 infection in human liver ductal organoids. SARS-CoV-2 N is indicated in red using our Anti-SARS CoV Nucleocapsid Antibody, while E-cadherin is in green and DAPI staining of chromatin in blue.

#### Immunofluorescence

**Image 3.** Immunofluorescence of Rabbit Anti-SARS-CoV Nucleocapsid (N) Antibody. Tissue: human Liver ductal organoids. Fixation: 4% PFA. Permeabilization: 0.25% Triton X-100. Antigen retrieval: not required. Primary antibody: Rabbit Anti-SARS-CoV (N) Antibody and Mouse Anti-E-Cadhedrin Antibody at 1:500 overnight at 2-8°C. Secondary antibody: Donkey Anti-Rabbit IgG CY3 Conjugated; Donkey Anti-Mouse IgG AlexaFluor 488 Conjugated for 1hr at RT. Nuclear Counterstain: DAPI. Staining showing Mock and Infected tissue: SARS-CoV Red signal, E-Cadhedrin green signal, with DAPI (blue) nuclear counterstain. [Zhao et al. (2020)]

Please check the product details page for more images. Overall 14 images are available for ABIN6952544.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 5/5 | Product datasheet for ABIN6952544 | 01/12/2024 | Copyright antibodies-online. All rights reserved.