

Mouse Anti-SARS-CoV-2 (COVID-19) Nucleocapsid Protein/SARS-CoV-2 NP [FIPV3-70]: MC0496

Intended Use: For Research Use Only

Description: Coronavirus is a genus of animal virus that belongs to the family Coronaviridae. Coronaviruses are enveloped viruses with a positive-sense single-stranded RNA genome and a helical symmetry that resemble a crown when viewed under an electron microscope. They primarily infect the upper respiratory and gastrointestinal tract of mammals and birds. Four or five different known strains of Coronavirus infect humans and are thought to be the cause of many common colds. The most publicized human Coronavirus, SARS-CoV, causes both upper and lower respiratory tract infections and can also cause gastroenteritis. This antibody also reacts with feline infectious peritonitis virus type 1 and 2 and is known to be specific for the nucleocapsid. It is also known to react with canine coronavirus (CCV), pig coronavirus transmissible gastroenteritis virus (TGEV) and ferret coronavirus. Some specific activity has been detected against bovine coronavirus (BCV). Clone FIPV3-70 exhibits negative reactivity against Feline Leukemia virus, Feline Immunodeficiency virus, Feline Calcivirus, Feline Herpes virus, Canine Adenovirus (type 2), Canine Distemper virus, Canine parvovirus and Canine Parainfluenza virus. It has been reported that clone FIPV3 recognizes the SARS-Cov-2 nucleocapsid protein.

Specifications:

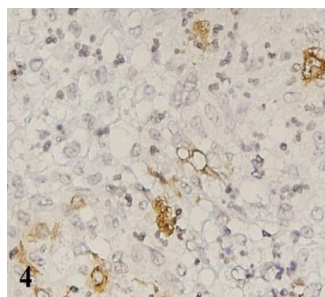
Clone:	FIPV3-70
Source:	Mouse
Isotype:	IgG2a
Reactivity:	SARS-CoV-2
Immunogen:	Coronavirus cocktail
Localization:	Cytoplasm and the nucleolus, a subnuclear structure
Formulation:	Protein A purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Package:	

Description	Catalog No.	Size
SARS-CoV-2 Nucleocapsid Protein/SARS-CoV-2 NP	MC0496	1 ml

IHC Procedure

Positive Control Tissue:	Human lung tissue
Concentrated Dilution:	20-500
Pretreatment:	Citrate pH6.0, pressure cooker for 15 minutes, or water bath at 95°-99°C for 30-60 minutes
Incubation Time and Temp:	Overnight @ 4°C
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FCoV. Small numbers of macrophages around necrotic foci show positive reactions in the cytoplasm

Other applications (reported):

Western Blot: 50-1000, detects a band of 50-56 kDa under reducing gels with CCV as antigen.
ELISA: 50-1000; Flow Cyt.: 50-1000; ICC/IF: 20-500.

References:

1. Respiratory viral infection in lung-transplant induces exosomes that trigger chronic-rejection. Gunasekaran M, et al. The Journal of Heart and Lung Transplantation Jan 21 2020.
2. A human monoclonal antibody blocking SARS-CoV-2 infection. Chunyan Wang, Berend-Jan Bosch, et al. Cold Spring Harbor Laboratory BioRxiv. March 2020.