

PRODUCT INFORMATION

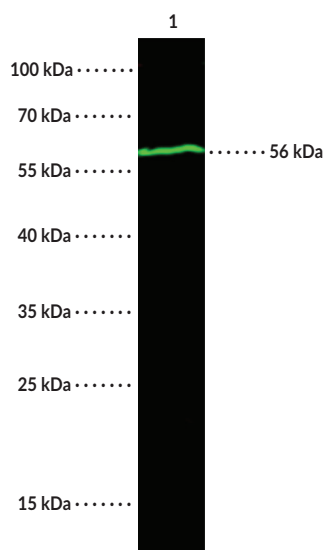


Influenza A Nucleoprotein Monoclonal Antibody (Clone 7B4G10G8) Item No. 37013

Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-affinity purified recombinant monoclonal antibody.
Synonyms:	Influenza A NP, Influenza A Nucleocapsid Protein
Cross Reactivity:	(+) Nucleocapsid protein; (-) Insect cell lysate
Species Reactivity:	(+) H1N1, H7N9 (A/Anhui/1/2013), H7N9 (A/Shanghai/1/2013)
Molecular Weight:	56 kDa
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	7B4G10G8
Host:	Mouse
Isotype:	IgG2b
Applications:	ELISA, and Western blot (WB); the recommended starting dilution is 1:1,000-1:2,000 for ELISA 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: Influenza A H1N1 Nucleoprotein
(30 ng)

WB of Influenza A Nucleoprotein
Monoclonal Antibody 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

Influenza A nucleoprotein is a viral protein encoded by the *NP* gene in influenza A RNA.¹ It is composed of an RNA-binding domain, oligomerization domains, and polymerase binding domains, and contains two nuclear localization signals and a cytoplasmic accumulation signal, which interacts with host actin.^{2,3} Influenza A nucleoprotein packages the viral RNA into a helical ribonucleoprotein (RNP) complex that is a template for viral replication. Influenza A is a causative agent of seasonal flu, an acute upper respiratory infection characterized by many symptoms, including fever, dry cough, sore throat, body aches, and a runny nose and can lead to life-threatening complications in individuals with high-risk medical conditions.⁴ Cayman's Influenza A Nucleoprotein Monoclonal Antibody (Clone 7B4G10G8) can be used for ELISA and Western blot (WB) applications. This recombinant antibody recognizes nucleoprotein at 53-56 kDa from H1N1 and H7N9.

References

1. Gorman, O.T., Bean, W.J., Kawaoka, Y., *et al.* Evolution of influenza A virus nucleoprotein genes: Implications for the origins of H1N1 human and classical swine viruses. *J. Virol.* **65(7)**, 3704-3714 (1991).
2. Portela, A. and Digard, P. The influenza virus nucleoprotein: A multifunctional RNA-binding protein pivotal to virus replication. *J. Gen. Virol.* **83(Pt. 4)**, 723-734 (2002).
3. Digard, P., Elton, D., Bishop, K., *et al.* Modulation of nuclear localization of the influenza virus nucleoprotein through interaction with actin filaments. *J. Virol.* **73(3)**, 2222-2231 (1999).
4. Moghadami, M. A narrative review of influenza: A seasonal and pandemic disease. *Iran J. Med. Sci.* **42(1)**, 2-13 (2017).

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