

Datasheet: MCA400

Description:	MOUSE ANTI INFLUENZA A NUCLEOPROTEIN
Specificity:	INFLUENZA A NUCLEOPROTEIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AA5H
Isotype:	IgG2a
Quantity:	1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Viral
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Influenza A / Puerto Rico / 8 / 34 (H1N1) and A/Bangkok / 1 / 79 (H3N2) viruses.
RRID	AB_2151884
Fusion Partners	Spleen cells from BALB/c mice were fused with cells of the P3 Ag8.653 mouse myeloma cell line.
Specificity	Mouse anti Influenza A Nucleoprotein antibody, clone AA5H recognizes an epitope within Influenza virus A nucleoprotein. Mouse anti Influenza A Nucleoprotein antibody, clone AA5H can be used in influenza A IFA typing in conjunction with MCA401 (clone GA2B).
References	<ol style="list-style-type: none"> Herold, S. <i>et al.</i> (2006) Alveolar epithelial cells direct monocyte transepithelial migration upon influenza virus infection: impact of chemokines and adhesion molecules. J Immunol. 177 (3): 1817-24. Thompson, C.I. <i>et al.</i> (2006) Infection of human airway epithelium by human and avian strains of influenza a virus. J Virol. 80: 8060-8. Ehrhardt, C. <i>et al.</i> (2007) Influenza A virus NS1 protein activates the PI3K/Akt pathway to mediate antiapoptotic signaling responses. J Virol. 81: 3058-67. Ehrhardt, C. <i>et al.</i> (2007) Activation of phosphatidylinositol 3-kinase signaling by the nonstructural NS1 protein is not conserved among type A and B influenza viruses. J Virol. 81: 12097-100. Ehrhardt, C. <i>et al.</i> (2007) A polyphenol rich plant extract, CYSTUS052, exerts anti influenza virus activity in cell culture without toxic side effects or the tendency to induce viral resistance. Antiviral Res. 76: 38-47. Pauli, E.K. <i>et al.</i> (2008) Influenza A virus inhibits type I IFN signaling via NF-kappaB-dependent induction of SOCS-3 expression. PLoS Pathog. 4(11): e1000196. Nencioni, L. <i>et al.</i> (2009) Bcl-2 expression and p38MAPK activity in cells infected with influenza A virus: impact on virally induced apoptosis and viral replication. J Biol Chem. 284: 16004-15. Jamali, A. <i>et al.</i> (2010) A DNA vaccine-encoded nucleoprotein of influenza virus fails to induce cellular immune responses in a diabetic mouse model. Clin Vaccine Immunol. 17: 683-7. Seitz, C. <i>et al.</i> (2010) High yields of influenza A virus in Madin-Darby canine kidney cells are promoted by an insufficient interferon-induced antiviral state. J Gen Virol. 91: 1754-63. Luig, C. <i>et al.</i> (2010) MAP kinase-activated protein kinases 2 and 3 are required for influenza A virus propagation and act via inhibition of PKR. FASEB J. 24: 4068-77. Shu, Y. <i>et al.</i> (2010) Avian influenza A(H5N1) viruses can directly infect and replicate in human gut tissues. J Infect Dis. 201: 1173-7. Gao, R. <i>et al.</i> (2010) A systematic molecular pathology study of a laboratory confirmed H5N1 human case. PLoS One. 5: e13315. Matarrese, P. <i>et al.</i> (2011) Pepstatin A alters host cell autophagic machinery and leads to a decrease in influenza A virus production. J Cell Physiol. 226 (12): 3368-77. Gabay, C. <i>et al.</i> (2011) Impact of synthetic and biologic disease-modifying antirheumatic drugs on antibody responses to the AS03-adjuvanted pandemic influenza vaccine: a prospective, open-label, parallel-cohort, single-center study. Arthritis Rheum. 63 (6): 1486-96.

15. Hrinčius, E.R. *et al.* (2011) Phosphatidylinositol-3-kinase (PI3K) is activated by influenza virus vRNA via the pathogen pattern receptor Rig-I to promote efficient type I interferon production. [Cell Microbiol. 13: 1907-19.](#)
16. Calmy, A. *et al.* (2012) Strong serological responses and HIV RNA increase following AS03-adjuvanted pandemic immunization in HIV-infected patients. [HIV Med. 13 \(4\): 207-18.](#)
17. Koerner, I. *et al.* (2012) Altered receptor specificity and fusion activity of the haemagglutinin contribute to high virulence of a mouse-adapted influenza A virus. [J Gen Virol. 93 \(Pt 5\): 970-9.](#)
18. Hassan, I.H. *et al.* (2012) Influenza A viral replication is blocked by inhibition of the inositol-requiring enzyme 1 (IRE1) stress pathway. [J Biol Chem. 287 \(7\): 4679-89.](#)
19. Matthaei M *et al.* (2013) Highly pathogenic H5N1 influenza A virus strains provoke heterogeneous IFN- α/β responses that distinctively affect viral propagation in human cells. [PLoS One. 8 \(2\): e56659.](#)
20. Dick, A. *et al.* (2015) Role of nucleotide binding and GTPase domain dimerization in dynamin-like myxovirus resistance protein A for GTPase activation and antiviral activity. [J Biol Chem. 290 \(20\): 12779-92.](#)
21. Shoji, M. *et al.* (2015) Bakuchiol Is a Phenolic Isoprenoid with Novel Enantiomer-selective Anti-influenza A Virus Activity Involving Nrf2 Activation. [J Biol Chem. 290 \(46\): 28001-17.](#)
22. Wörmann, X. *et al.* (2016) Genetic characterization of an adapted pandemic 2009 H1N1 influenza virus that reveals improved replication rates in human lung epithelial cells. [Virology. 492: 118-29.](#)
23. Kim HR *et al.* (2016) Ostrich (*Struthio camelus*) Infected with H5N8 Highly Pathogenic Avian Influenza Virus in South Korea in 2014. [Avian Dis. 60 \(2\): 535-9.](#)
24. Thulasi Raman, S.N. *et al.* (2016) DDX3 Interacts with Influenza A Virus NS1 and NP Proteins and Exerts Antiviral Function through Regulation of Stress Granule Formation. [J Virol. 90 \(7\): 3661-75.](#)
25. Sadewasser, A. *et al.* (2017) Quantitative Proteomic Approach Identifies Vpr Binding Protein as Novel Host Factor Supporting Influenza A Virus Infections in Human Cells. [Mol Cell Proteomics. 16 \(5\): 728-42.](#)
26. Sid, H. *et al.* (2017) Interaction of Influenza A Viruses with Oviduct Explants of Different Avian Species. [Front Microbiol. 8: 1338.](#)
27. Youchan, B. *et al.* (2018) Pathological lesions and antigen localization in chicken, ducks and Japanese quail naturally infected by novel highly pathogenic avian influenza (H5N6), Korea, 2016 [J Prev Vet Med. 42 \(3\): 91-8.](#)
28. Mayr, J. *et al.* (2018) Unravelling the Role of O-glycans in Influenza A Virus Infection. [Sci Rep. 8 \(1\): 16382.](#)
29. Prokopyeva, E.A. *et al.* (2019) Pathology of A(H5N8) (Clade 2.3.4.4) Virus in Experimentally Infected Chickens and Mice. [Interdiscip Perspect Infect Dis. 2019: 4124865.](#)
30. MacKerracher, A. *et al.* (2022) PLGA particle vaccination elicits resident memory CD8 T cells protecting from tumors and infection. [Eur J Pharm Sci. : 106209.](#)
31. Kühnl, A. *et al.* (2018) Late Endosomal/Lysosomal Cholesterol Accumulation Is a Host Cell-Protective Mechanism Inhibiting Endosomal Escape of Influenza A Virus. [mBio. 9 \(4\): e01345-18.](#)
32. Forbester, J.L. *et al.* (2020) IRF5 Promotes Influenza Virus-Induced Inflammatory

Responses in Human Induced Pluripotent Stem Cell-Derived Myeloid Cells and Murine Models. [J Virol. 94 \(9\): e00121-20.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA400>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

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