

# Datasheet: MCA400 BATCH NUMBER 165120

Description:	MOUSE ANTI INFLUENZA A NUCLEOPROTEIN
Specificity:	INFLUENZA A NUCLEOPROTEIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AA5H
Isotype:	lgG2a
Quantity:	1 mg

## **Product Details**

Applications	This product has been reported to work in the following applications. This informati 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	information. For general protocol recommendations, please visit <u>www.bio-</u>					
	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.					
	the unabody for doe in th		yotonn don	ng appropriate negativ			
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 <sub>3</sub> )						
Approx. Protein	IgG concentration 1.0 mg/ml						

### Concentrations

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	<b>Mouse anti Influenza A Nucleoprotein antibody, clone AA5H</b> 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 <u>MCA401</u> (clone GA2B).
References	<ol> <li>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.</li> <li>Thompson, C.I. <i>et al.</i> (2006) Influenza A virus NS1 protein activates the PI3K/Akt pathway to mediate antiapoptotic signaling responses. J Virol. 81: 3058-67.</li> <li>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.</li> <li>Ehrhardt, C. <i>et al.</i> (2007) A polyphenol rich plant extract, CYSTUS052, exerts anti influenza virus extivity in cell culture without toxic side effects or the tendency to induce viral resistance. Antiviral Res. 76: 38-47.</li> <li>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.</li> <li>Nencioni, L. <i>et al.</i> (2010) A DNA vaccine-encoded nucleoprotein of influenza virus fails to induce cellular immune responses in a diabetic mouse model. <u>Clin Vaccine Immunol. 17: 683-7.</u></li> <li>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. <u>J Gen Virol. 91: 1754-63.</u></li> <li>Luig, C. <i>et al.</i> (2010) ANP kinase-activated protein kinases 2 and 3 are required for influenza A virus propagation and act via inhibition of PKR. <u>FASEB J. 24: 4068-77.</u></li> <li>Shu, Y. <i>et al.</i> (2010) A systematic molecular pathology study of a laboratory confirmed H5N1 human case. <u>J Infect Dis. 201: 1173-7.</u></li> <li>Gao, R. <i>et al.</i> (2011) Appendix A virus probagic machinery and leads to a decrease in influenza A virus propagation and act via inhibition of PKR. <u>FASEB J. 24: 4068-77.</u></li> <li>Gao, R. <i>et al.</i> (2011) Avian influenza A virus probagic machinery and leads to a decrease in influenza A virus production. <u>J Cell Physiol. 2</u></li></ol>

vaccine: a prospective, open-label, parallel-cohort, single-center study. <u>Arthritis Rheum. 63</u> (6): 1486-96.

15. Hrincius, 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. <u>Cell Microbiol. 13: 1907-19.</u>

16. Calmy, A. *et al.* (2012) Strong serological responses and HIV RNA increase following AS03-adjuvanted pandemic immunization in HIV-infected patients. <u>HIV Med. 13 (4):</u> 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 <u>Virol. 93 (Pt 5): 970-9.</u>

18. Hassan, I.H. *et al.* (2012) Influenza A viral replication is blocked by inhibition of the inositol-requiring enzyme 1 (IRE1) stress pathway. <u>J Biol Chem. 287 (7): 4679-89.</u>

19. Matthaei M *et al.* (2013) Highly pathogenic H5N1 influenza A virus strains provoke heterogeneous IFN- $\alpha/\beta$  responses that distinctively affect viral propagation in human cells. <u>PLoS One. 8 (2): e56659.</u>

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 Enantiomerselective Anti-influenza A Virus Activity Involving Nrf2 Activation. <u>J Biol Chem. 290 (46):</u> 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. <u>Virology. 492: 118-29.</u>

23. Kim HR *et al.* (2016) Ostrich (*Struthio camelus*) Infected with H5N8 Highly
Pathogenic Avian Influenza Virus in South Korea in 2014. <u>Avian Dis. 60 (2): 535-9.</u>
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. <u>Mol</u> <u>Cell Proteomics. 16 (5): 728-42.</u>

26. Sid, H. *et al.* (2017) Interaction of Influenza A Viruses with Oviduct Explants of Different Avian Species. <u>Front Microbiol. 8: 1338.</u>

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. <u>Sci Rep. 8 (1): 16382.</u>

29. Prokopyeva, E.A. *et al.* (2019) Pathology of A(H5N8) (Clade 2.3.4.4) Virus in Experimentally Infected Chickens and Mice. <u>Interdiscip Perspect Infect Dis. 2019:</u> <u>4124865.</u>

30. MacKerracher, A. *et al.* (2022) PLGA particle vaccination elicits resident memory CD8 T cells protecting from tumors and infection. <u>Eur J Pharm Sci. : 106209.</u>

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	) <u>HRP</u>		
Goat Anti Mouse IgG (STAR76)	RPE		
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>		
Goat Anti Mouse IgG (H/L) (STAR117)	Alk. Phos., DyLight®488, DyLight®550,		
	DyLight®650, DyLight®680, DyLight®80	<u>0</u> ,	
	<u>FITC, HRP</u>		
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>		
Goat Anti Mouse IgG (STAR77)	HRP		
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP		
Rabbit Anti Mouse IgG (STAR13)	HRP		
North & South         Tel: +1 800 265 7376         Worldwi           America         Fax: +1 919 878 3751	de Tel: +44 (0)1865 852 700 Europe Fax: +44 (0)1865 852 739	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50	

 Email: antibody\_sales\_us@bio-rad.com
 Email: antibody\_sales\_uk@bio-rad.com
 Email: antibody\_sales\_de@bio-rad.com

 To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
 bio-rad-antibodies.com/datasheets

'M389520:210806'

### Printed on 13 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint