Datasheet: 5315-0064

Description:	GOAT ANTI INFLUENZA A H1N1
Specificity:	INFLUENZA A H1N1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 ml

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			▪	
Western Blotting			▪	
Immunofluorescence	▪			
Haemagglutination	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species	Viral
Product Form	Purified IgG - liquid
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, strain USSR (H1N1)

RRID	AB_620739
Specificity	**Goat anti Influenza A H1N1 polyclonal antibody** is specific for Influenza A virus H1N1 by Haemagglutination inhibition. This goat anti Influenza A H1N1 polyclonal antibody does not react with Influenza B, RSV, Para 1-3 or Adenovirus. It does not react with HEp-2 cells but may react with some chicken cellular proteins. Influenza type A viruses are divided into subtypes based on the antigenic differences of two viral surface proteins, hemagglutinin (H) and neuraminidase (N). On infection of the respiratory tract, the hemagglutinin molecule binds to sialic acid-containing receptors on the epithelial cells resulting in endocytosis. Once the virus has been engulfed, the hemagglutinin allows the viral membrane to fuse with the endosomal membrane. Neuraminidase functions to aid viral release from host cells by cleaving terminal sialic acid residues from carbohydrate moieties on the cell surface. Viral release also requires the interaction of the viral M1 protein with the cellular scaffold G-like protein RACK1 (Demirov *et al.* 2012). Subtype antigenic variations result from a process known as antigenic drift whereby these surface proteins constantly mutate in order to evade the host immune response. Subtype A(H1N1) was the cause of Spanish flu pandemic that killed approximately 50,000,000 people between 1918-1919.
References	1. Zielecki, F. *et al.* (2010) Virulence determinants of avian H5N1 influenza A virus in mammalian and avian hosts: The role of the C-terminal ESEV motif in the viral NS1 protein. J Virol. 117: 439 - 48 2. Kash JC *et al.* (2011) Lethal synergism of 2009 pandemic H1N1 influenza virus and *Streptococcus pneumoniae* coinfection is associated with loss of murine lung repair responses. MBio. 2(5). pii: e00172-11. 3. Weinheimer, V.K. *et al.* (2012) Influenza A viruses target type II pneumocytes in the human lung. J Infect Dis. 206 (11): 1685-94. 4. Nicol, M.Q. *et al.* (2012) A novel family of peptides with potent activity against influenza A viruses. J Gen Virol. 93: 980-6. 5. Meunier, I. and von Messling, V. (2012) PB1-F2 Modulates Early Host Responses but Does not Affect the Pathogenesis of H1N1 Seasonal Influenza Virus. J Virol. 86: 4271-8. 6. Demirov, D. *et al.* (2012) Interaction of influenza A virus matrix protein with RACK1 is required for virus release. Cell Microbiol. 14: 774-89. 7. Kallfass, C. *et al.* (2013) Visualizing the beta interferon response in mice during infection with influenza A viruses expressing or lacking nonstructural protein 1. J Virol. 87 (12): 6925-30. 8. Schliehe, C. *et al.* (2015) The methyltransferase Setdb2 mediates virus-induced susceptibility to bacterial superinfection. Nat Immunol. 16 (1): 67-74. 9. Nicol, M.Q. *et al.* (2019) Lack of IFNγ signaling attenuates spread of influenza A virus in vivo and leads to reduced pathogenesis. Virology. 526: 155-164. 10. Demminger, D.E. *et al.* (2020) Adeno-associated virus-vectored influenza vaccine elicits neutralizing and Fcγ receptor-activating antibodies. EMBO Mol Med. 12 (5):

e10938.
11. Goncheva, M.I. *et al.* (2020) *Staphylococcus aureus* Lipase 1 Enhances Influenza A Virus Replication. mBio. 11 (4): e00975-20.
12. Hardisty, G. *et al.* (2024) Latent gammaherpesvirus infection enhances type I IFN response and reduces virus spread in an influenza A virus co-infection model. J Gen Virol. 105 (2) 8 Feb [Epub ahead of print].

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/5315-0064 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Goat IgG (Fc) (STAR122...) FITC, HRP

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M427990:240301'

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