Datasheet: MCA2278

BATCH NUMBER 170041

Description:	MOUSE ANTI FELINE IMMUNODEFICIENCY VIRUS p24 gag
Specificity:	FELINE IMMUNODEFICIENCY VIRUS p24 gag
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	PAK3-2C1
Isotype:	IgG1
Quantity:	0.25 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 (1)	▪			
Immunohistology - Frozen (2)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

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 appropriate negative/positive controls.

(1) **Membrane permeabilization is required for this application. The use of Leucoperm (Product Code BUF09) is recommended for this purpose.**

(2)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

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
RRID	AB_2108361
Specificity	**Mouse anti Feline Immunodeficiency Virus p24 gag antibody, clone PAK3-2C1** recognizes an epitope on the C-terminal alpha-helix 9 within the amino-acid sequence AEVKLYLKQSLSIAN of feline immunodeficiency virus (FIV) p24 gag. The lentivirus FIV, responsible for a progressive and debilitating immune deficiency syndrome in domestic cats, similar to that caused by the human Immunodeficiency Virus (HIV), is a complex retrovirus with a tightly-packed genome, containing the structural genes *gag, env* and *pro-pol* and the accessory genes *vif, rev* and *ORF-A/2*. The specific binding epitope recognized by Mouse anti Feline Immunodeficiency Virus p24 gag antibody, clone PAK3-2C1 appears to be enclosed in a tight peptide coil during gag production and maturation. The addition of 0.3% octylphenol ethoxylate detergent is recommended to reveal this epitope for antibody binding. Mouse anti Feline Immunodeficiency Virus p24 gag antibody, clone PAK3-2C1 detects a dominant band of approximately 24kDa, and also detects p24 gag precursor bands at 36, 39, 49 and 52 kDa under reducing conditions in Western blotting. Mouse anti Feline Immunodeficiency Virus p24 gag antibody, clone PAK3-2C1 does not recognize Feline Leukaemia Virus (FeLV), Feline Herpes Virus (FHV) type 1, Feline Coronavirus or Feline Calicivirus.
Flow Cytometry	Use 10µl of the suggested working dilution to label $1x10^6$ cells in 100µl
References	1. Lerner, D.L. *et al.* (1995) Increased mutation frequency of feline immunodeficiency virus lacking functional deoxyuridine-triphosphatase. Proc Natl Acad Sci U S A. 92 (16): 7480-4. 2. Chatterji, U. *et al.* (2000) Feline immunodeficiency virus Vif localizes to the nucleus. J Virol. 74 (6): 2533-40. 3. Rolim, V.M. *et al.* (2016) Myocarditis caused by Feline Immunodeficiency Virus in Five Cats with Hypertrophic Cardiomyopathy. J Comp Pathol. 154 (1): 3-8. 4. Freer, G. *et al.* (2007) Effects of feline immunodeficiency virus on feline monocyte-derived dendritic cells infected by spinoculation. J Gen Virol. 88 (Pt 9): 2574-82. 5. Del Vecchio, C. *et al.* (2020) Alix-Mediated Rescue of Feline Immunodeficiency Virus Budding Differs from That Observed with Human Immunodeficiency Virus. J Virol. 4 (11): e02019-19. 6. Biezus, G. *et al.* (2020) Plasma Cell Pododermatitis Associated With Feline Leukemia

Virus (FeLV) and Concomitant Feline Immunodeficiency Virus (FIV) Infection in a Cat. Top Companion Anim Med. 41: 100475.
7. Wronski, J.G. *et al.* (2023) Ophthalmic and immunopathological characterization of systemic infectious diseases in cats. Vet Pathol. 60 (3): 352-9.

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/MCA2278 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) RPE
Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

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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
'M418701:230427'

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