

Datasheet: MCA2278

BATCH NUMBER 167588

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	<p>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.</p> <p>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 <i>gag</i>, <i>env</i> and <i>pro-pol</i> and the accessory genes <i>vif</i>, <i>rev</i> and <i>ORF-A/2</i>.</p> <p>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% Triton-X detergent is recommended to reveal this epitope for antibody binding.</p> <p>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.</p> <p>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.</p>
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. Wronski, J.G. *et al.* (2023) Ophthalmic and immunopathological characterization of

systemic infectious diseases in cats. [Vet Pathol. 60 \(3\): 352-9.](#)

Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
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 (STAR9...) [FITC](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

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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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