

Datasheet: MCA2724

Description:	MOUSE ANTI CAT MHC CLASS II
Specificity:	MHC CLASS II
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	PF8J-9B
Isotype:	IgG2a
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	▪			
Immunohistology - Frozen			▪	
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.

Target Species	Cat
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	IgG concentration 1.0mg/ml

Concentrations

RRID AB_915357

Specificity **Mouse anti Cat MHC class II antibody, clone PF8J-9B** recognizes an epitope within the ~30 kDa beta chain region of cat MHC class II molecule, expressed by antigen presenting cells, B cells, monocytes and activated T lymphocytes. The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In cats, this is referred to as the feline leukocyte antigen (FLA) region.

The complex retrovirus FIV (feline immunodeficiency virus), is responsible for a progressive and debilitating immune deficiency syndrome in domestic cats, similar to that caused by the human Immunodeficiency virus (HIV). The intensity of MHC Class II expression on cat lymphocyte membranes vary in association with feline retrovirus infections ([Ohno et al. 1992](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

Western Blotting MCA2724 detects band/s of approximately 29-31kDa on fractionated cat lymphocyte cell lysates under non-reducing conditions.

References

1. Litster, A.L. *et al.* (2013) Diagnostic utility of a direct immunofluorescence test to detect feline coronavirus antigen in macrophages in effusive feline infectious peritonitis. [Vet J. 198 \(2\): 362-6.](#)
2. Zhang, L. *et al.* (2015) Phenotypic and functional analysis of CD1a+ dendritic cells from cats chronically infected with feline immunodeficiency virus. [Comp Immunol Microbiol Infect Dis. 42: 53-9.](#)
3. Simões, R.D. *et al.* (2019) Effects of Regulatory T Cell Depletion on NK Cell Responses against *Listeria monocytogenes* in Feline Immunodeficiency Virus Infected Cats. [Viruses. 11\(11\): 984.](#)
4. Lara, M.L. *et al.* (2023) Influence of culture conditions on the secretome of mesenchymal stem cells derived from feline adipose tissue: Proteomics approach. [Biochimie. 211: 78-86.](#)

Further Reading

1. Hunt, P. *et al.* (1995) Variable expression of major histocompatibility complex class II in the domestic cat. [Res Vet Sci. 59 \(3\): 195-200.](#)

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/MCA2724>

10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

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

Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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
'M389473:210806'

Printed on 26 Jun 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)