

Datasheet: MCA2375F

Description:	MOUSE ANTI HUMAN CD68:FITC
Specificity:	CD68
Other names:	MACROSIALIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	Ki-M7
Isotype:	IgG1
Quantity:	100 TESTS/2ml

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			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

(1)Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: African green monkey</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

Preparation Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution Phosphate buffered saline.

Preservative Stabilisers 0.05% Sodium Azide
1% Bovine Serum Albumin

Immunogen Human lymph node tissue.

External Database

Links

UniProt:

[P34810](#) [Related reagents](#)

Entrez Gene:

[968](#) CD68 [Related reagents](#)

RRID AB_2074720

Specificity

Mouse anti Human CD68 antibody, clone Ki-M7 recognizes human CD68 an integral membrane glycoprotein of ~110 kDa also known as Macrosialin or Gp110. CD68 is predominantly expressed on the intracellular lysosomes of macrophages/monocytes, including Kupffer cells, microglia, histiocytes and osteoclasts, and is expressed to a lesser extent by dendritic cells and peripheral blood granulocytes. Elevated expression of CD68 has been demonstrated on CD34+ cells in various human malignancies, including Acute Myeloid Leukemia.

In immunohistochemistry, CD68 can be used to aid in the identification of blastic NK lymphomas, some B cell lymphomas, and to help diagnose disorders relating to macrophage abnormalities, including malignant histiocytosis and Gaucher's disease.

Clone Ki-M7 has also been reported as being suitable for use in immunoprecipitation.

Flow Cytometry

Use 20ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Micklem, K. *et al.* (1989) A human macrophage-associated antigen (CD68) detected by six different monoclonal antibodies. [Br J Haematol. 73 \(1\): 6-11.](#)
2. Karlsson, K.R. *et al.* (2008) Homogeneous monocytes and macrophages from human embryonic stem cells following coculture-free differentiation in M-CSF and IL-3. [Exp Hematol. 36 \(9\): 1167-75.](#)
3. Gottfried, E. *et al.* (2008) Expression of CD68 in non-myeloid cell types. [Scand J Immunol. 67: 453-63.](#)
4. Sakakibara, S. *et al.* (2009) Gene regulation and functional alterations induced by Kaposi's sarcoma-associated herpesvirus-encoded ORFK13/vFLIP in endothelial cells. [J Virol. 83: 2140-53.](#)

5. Bendelja, K. *et al.* (2010) Decreased Toll-like receptor 8 expression and lower TNF- α synthesis in infants with acute RSV infection. [Respir Res. 11: 143.](#)
6. Vergo, S. *et al.* (2011) Acid-sensing ion channel 1 is involved in both axonal injury and demyelination in multiple sclerosis and its animal model. [Brain. 134 \(Pt 2\): 571-84.](#)

Further Reading 1. Sadovnikova, E. *et al.* (2002) The CD68 protein as a potential target for leukaemia-reactive CTL. [Leukemia. 16 \(10\): 2019-26.](#)

Storage Store at 4°C.
DO NOT FREEZE.
This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee Guaranteed until date of expiry. Please see product label.

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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](https://www.bio-rad-antibodies.com/datasheets)

'M361867:200325'

Printed on 08 Apr 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)