

Datasheet: MCA2375F

BATCH NUMBER 172580

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 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.

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	0.05% sodium azide (NaN ₃)		
Stabilisers	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	<p>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.</p> <p>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.</p> <p>Clone Ki-M7 has also been reported as being suitable for use in immunoprecipitation.</p>		
Flow Cytometry	Use 20µl of the suggested working dilution to label 10 ⁶ cells in 100µl		
References	<ol style="list-style-type: none"> Micklem, K. <i>et al.</i> (1989) A human macrophage-associated antigen (CD68) detected by six different monoclonal antibodies. Br J Haematol. 73 (1): 6-11. Karlsson, K.R. <i>et al.</i> (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. Gottfried, E. <i>et al.</i> (2008) Expression of CD68 in non-myeloid cell types. Scand J Immunol. 67: 453-63. Sakakibara, S. <i>et al.</i> (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. <i>et al.</i> (2002) The CD68 protein as a potential target for leukaemia-reactive CTL. Leukemia. 16 (10): 2019-26.
Storage	This product is shipped at ambient temperature. 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 for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2375F
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M440542:250523'

Printed on 16 Dec 2025