

Datasheet: MCA2375F

**BATCH NUMBER 161750**

<b>Description:</b>	MOUSE ANTI HUMAN CD68:FITC
<b>Specificity:</b>	CD68
<b>Other names:</b>	MACROSIALIN
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	Ki-M7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: African green monkey</p> <p><b>N.B.</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>
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline.		
<b>Preservative Stabilisers</b>	0.05% Sodium Azide 1% Bovine Serum Albumin		
<b>Immunogen</b>	Human lymph node tissue.		
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P34810</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">968</a> CD68 <a href="#">Related reagents</a>		
<b>RRID</b>	AB_2074720		
<b>Specificity</b>	<p><b>Mouse anti Human CD68 antibody, clone Ki-M7</b> 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>		
<b>Flow Cytometry</b>	Use 20ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.		
<b>References</b>	<ol style="list-style-type: none"> <li>Micklem, K. <i>et al.</i> (1989) A human macrophage-associated antigen (CD68) detected by six different monoclonal antibodies. <a href="#">Br J Haematol. 73 (1): 6-11.</a></li> <li>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. <a href="#">Exp Hematol. 36 (9): 1167-75.</a></li> <li>Gottfried, E. <i>et al.</i> (2008) Expression of CD68 in non-myeloid cell types. <a href="#">Scand J Immunol. 67: 453-63.</a></li> <li>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. <a href="#">J Virol. 83: 2140-53.</a></li> </ol>		

5. Bendelja, K. *et al.* (2010) Decreased Toll-like receptor 8 expression and lower TNF- $\alpha$  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.](#)

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

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**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.

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

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2375F>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

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

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