

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	Reacts with: African green monkey N.B. Antibody reactivity and working conditions may vary between species.								
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>FITC</td><td>490</td><td>525</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525		
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								
Stabilisers	1% Bovine Serum Albumin								

Immunogen	Human lymph node tissue.
External Database Links	UniProt: P34810 Related reagents Entrez Gene: 968 CD68 Related reagents
Specificity	Mouse anti Human CD68 antibody, clone Ki-M7 recognizes the 110KD integral membrane glycoprotein CD68 (Macrosialin) 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 immunohistochemical studies, 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 studies.
Flow Cytometry	Use 20ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Kreipe, H. <i>et al.</i> (1987) Ki-M7 monoclonal antibody specific for myelomonocytic cell lineage and macrophages in human. J Histochem Cytochem. 35 (10): 1117-26. 2. Diop, O.M. <i>et al.</i> (2000) High levels of viral replication during primary simian immunodeficiency virus SIVagm infection are rapidly and strongly controlled in African green monkeys. J Virol. 74 (16): 7538-47. 3. 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. 4. Bendelja, K. <i>et al.</i> (2010) Decreased Toll-like receptor 8 expression and lower TNF-α synthesis in infants with acute RSV infection. Respir Res. 11: 143. 5. Vergo, S. <i>et al.</i> (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. 6. 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. 7. Gottfried, E. <i>et al.</i> (2008) Expression of CD68 in non-myeloid cell types. Scand J Immunol. 67: 453-63. 8. 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.
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	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.
Shelf Life	18 months from date of despatch.

**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 \(BUF070B\)](#)

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