Datasheet: MCA2375F

BATCH NUMBER 155860

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. 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.

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 histocytosis 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 10^6 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: https://www.bio-rad-antibodies.com/SDS/MCA2375F 10041
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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M361867:200325'

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