

Monoclonal Antibody to CD68 - FITC

Alternate names: Gp110, Macrophage marker, Macrosialin

Catalog No.: BM4111F

Quantity: 100 Tests

Background: The CD68 antigen is a 37kD transmembrane protein that is post-translationally glycosylated to give a protein of 87-115kD. CD68 is specifically expressed by tissue macrophages, Langerhans cells and at low levels by dendritic cells. It could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. It binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow macrophages to crawl over selectin bearing substrates or other cells.

Elevated expression of CD68 has been demonstrated on CD34+ cells in various human malignancies, including several Acute Myeloid Leukaemia studies.

Uniprot ID: [P34810](#)

NCBI: [NP_001035148.1](#)

GeneID: [968](#)

Host / Isotype: Mouse / IgG1

Clone: Ki-M7

Immunogen: Cell suspensions of Human lymph node

Format: **State:** Liquid purified Ig fraction from tissue culture supernatant

Purification: Protein A Chromatography

Buffer System: PBS containing 0.05% Sodium Azide as preservative and 1% BSA as stabiliser

Label: FITC – Fluorescein Isothiocyanate Isomer 1

Absorption / Emission: 495 nm / 528 nm

Applications: **Flow Cytometry:** Use 10 µl to label 10e6 cells in 100 µl (Membrane permeabilisation is required).

Clone KiM7 has been reported as being also suitable for use in Immunoprecipitation and Immunohistochemistry on Frozen Sections.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Specificity:

CD68 antibody BM4111F recognizes the 110KD integral membrane glycoprotein CD68 (Macrosialin) predominantly expressed on the intracellular lysosomes of monocytes and macrophages and to a lesser extent by dendritic cells and peripheral blood granulocytes.

Species: Human.

Other species not tested.

Storage:

Store the antibody undiluted at 2-8°C.

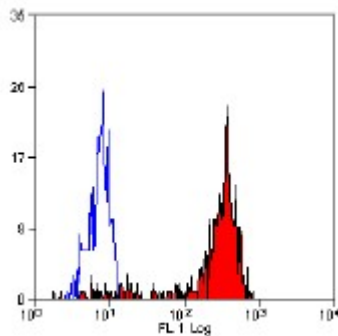
DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: One year from despatch.

General References:

1. Kreipe, H. et al. (1987). Ki-M7 Monoclonal Antibody Specific for Myelomonocytic Cell Lineage and Macrophages in Human. *J. Histochem. Cytochem.* 35(10): 1117-1126.
2. Diop, O.M. et al. (2000). High Levels of Viral Replication during Primary Simian Immunodeficiency Virus SIVagm Infection Are Rapidly and Strongly Controlled in African Green Monkeys. *J. Virology* 74(16): 7538-7547.
3. Micklem, K. et al. (1989). A human macrophage-associated antigen (CD68) detected by six different monoclonal antibodies. *Brit. J. Haem* 73: 6-11.
4. Glushakova, S. et al. (1999). Nef Enhances Human Immunodeficiency Virus Replication and Responsiveness to Interleukin-2 in Human Lymphoid Tissue Ex Vivo. *J. Virology* 73(5): 3968-3974.
5. Sadovnikova, E. et al. (2002). The CD68 protein as a potential target for leukaemia-reactive CTL. *Leukemia* 16(10): 2019-2026.
6. 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.

Pictures:

Staining of human peripheral blood monocytes with Mouse anti Human CD68 antibody -FITC (BM4111F) following permeabilisation.

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