

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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#### Product datasheet

# Mouse anti CD68 (Macrosialin), conjugated to FITC

mordicmubio.com/products/Mouse-anti-CD68-Macrosialin-conjugated-to-FITC/GM-4152-CE\_slash\_IVD

Catalog number: GM-4152-CE/IVD

Clone	Ki-M7		
Isotype	lgG1		
Product Type	Primary Antibodies		
Units	2ml (100 Tests)		
Host	Mouse		
Species Reactivity	Human		
Application	Flow Cytometry		

## **Background**

CD68 (macrosialin) is a type-one membrane protein with significant sequence homology to a family of lysosomal-associated glycoproteins (lamp). CD68 molecules are predominantly located intracellularily in cytoplasmic granules but can also be detected in smaller amounts at the cell surface. Particular strong intracellular expression is observed for monocytes and macrophages. In addition, Langerhans cells as well as plasmacytoid dendritic cells express clear-cut levels of CD68. Low-level reactivity is also observed with a subset of B lymphocytes and activated T lymphocytes. Oxidized low-density lipoprotein is a ligand for CD68. The CD68 mAb permits the identification and enumeration of monocytes, Langerhans cells and plasmacytoid dendritic cells (in combination with CD4/CD56 staining) in normal and malignant human blood and bone marrow samples using flow cytometry. Results must be put within the context of other diagnostic tests as well as the clinical history of the patient by a certified professional before final interpretation. Analyses performed with this antibody should be paralleled by positive and negative controls. If unexpected results are obtained which cannot be attributed to differences in laboratory procedures, please contact us.

#### **Product**

Purified by Chromatography, Storage buffer: PBS pH 7.2, 1% BSA, 0.05% NaN3

Product Form: FITC

Formulation: PBS pH 7.2, 1% BSA, 0.05% NaN3

Purification Method: Purified by Chromatography

## **Specificity**

The CD68 mAb (clone Ki-M7) reacts with human macrosialin. The sensitivity of CD68 mAb is determined by staining well-defined blood samples from representative donors with serial-fold mAb dilutions to obtain a titration curve that allows relating the mAb concentration to the percentage of stained cells and geometric MFI (mean fluorescence intensity). For this purpose, a mAb concentration range is selected to include both the saturation point (i.e. the mAb dilution expected to bind all epitopes on the target cell) and the detection threshold (i.e. the mAb dilution expected to represent the least amount of mAb needed to detect identical percentage of cells). In practice, 50µl of leukocytes containing 10^7 cells/ml are stained with 20µl mAb of various dilutions to obtain a titration curve and to identify the saturation point and detection threshold. The final concentration of the product is then adjusted to be at least 3-fold above the detection threshold. In addition and to control lot-to-lot variation, the given lot is compared and adjusted to fluorescence standards with defined intensity.

## **Applications**

Permeabilization and Staining Procedure - In combination with our Permeabilization Kit FIX&PERM? (Cat. No. GAS-002) intracellular CD68 can be easily stained in cell suspensions. - For each sample to be analyzed add 50 µl of whole blood, bone marrow or mononuclear cell suspension in a 5ml tube - Add 100 µl of Reagent A (Fixation Medium, stored and used at room temperature) - Incubate for 15 minutes at room temperature - Add 5 ml phosphate buffered saline and centrifuge cells for 5 minutes at 300 g - Remove supernatant and add to cell pellet 100µl Reagent B (Permeabilization Medium) and 20 µl of the CD68 monoclonal antibody conjugate - Vortex at low speed for 1-2 seconds - Incubate for 15 minutes at room temperature - Wash cells with phosphate buffered saline as described above - Remove supernatant and resuspend cells in sheath fluid for immediate analysis or resuspend cells in 0.5 ml 1.0 % formaldehyde and store them at 2-8°C in the dark. Analyze fixed cells within 24 hours

#### Storage

Nordic-MUbio monoclonal antibody reagents contain optimal concentrations of affinity-purified antibody. For stability reasons this monoclonal antibody solution contains sodium azide. These reagents should be stored at 2-8°C (DO NOT FREEZE!) and protected from prolonged exposure to light. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance or the concentration of the product. Stability of the reagent: Please refer to the expiry date printed onto the vial. The use of the reagent after the expiration date is not recommended.

#### Caution

When used for in vitro diagnostic purposes results must be put within the context of other diagnostic tests as well as the clinical history of the patient by a certified professional

before final interpretation. Analyses performed with this antibody should be paralleled by positive and negative controls. If unexpected results are obtained which cannot be attributed to differences in laboratory procedures, please contact us. This product may contain hazardous ingredients. Please refer to the Safety Data Sheets (SDS) for additional information and proper handling procedures. Dispose product remainders according to local regulations. This datasheet is as accurate as reasonably achievable, but Exalpha Biologicals accepts no liability for any inaccuracies or omissions in this information.

#### References

1. Davey, F. R., Cordell, J. L., Erber, W. N., Pulford, K. A., Gatter, K. C. & Mason, D. Y. (1988) J Clin Pathol 41, 753-8. 2. Feuillard, J., Jacob, M. C., Valensi, F., Maynadie, M., Gressin, R., Chaperot, L., Arnoulet, C., Brignole-Baudouin, F., Drenou, B., Duchayne, E., Falkenrodt, A., Garand, R., Homolle, E., Husson, B., Kuhlein, E., Le Calvez, G., Sainty, D., Sotto, M. F., Trimoreau, F. & Bene, M. C. (2002) Blood 99, 1556-63. 3. Fukuda, M. (1991) J Biol Chem 266, 21327-30. 4. Holness, C. L. & Simmons, D. L. (1993) Blood 81, 1607-13. 5. Knapp, W., Strobl, H. & Majdic, O. (1994) Cytometry 18, 187-98. 6. Pulford, K. A., Rigney, E. M., Micklem, K. J., Jones, M., Stross, W. P., Gatter, K. C. & Mason, D. Y. (1989) J Clin Pathol 42, 414-21. 7. Rabinowitz, S. S. & Gordon, S. (1991) J Exp Med 174, 827-36. 8. Ramprasad, M. P., Fischer, W., Witztum, J. L., Sambrano, G. R., Quehenberger, O. & Steinberg, D. (1995) Proc Natl Acad Sci U S A 92, 9580-4. 9. Ramprasad, M. P., Terpstra, V., Kondratenko, N., Quehenberger, O. & Steinberg, D. (1996) Proc Natl Acad Sci U S A 93, 14833-8. 10. Sadovnikova, E., Parovichnikova, E. N., Savchenko, V. G., Zabotina, T. & Stauss, H. J. (2002) Leukemia 16, 2019-26. 11. Scheinecker, C., Strobl, H., Fritsch, G., Csmarits, B., Krieger, O., Majdic, O. & Knapp, W. (1995) Blood 86, 4115-23. 12. Strobl, H. & Knapp, W. (2004) J Biol Regul Homeost Agents 18, 335-9. 13. Strobl, H., Scheinecker, C., Csmarits, B., Majdic, O. & Knapp, W. (1995) Br J Haematol 90, 774-82. 14. Strobl, H., Scheinecker, C., Riedl, E., Csmarits, B., Bello-Fernandez, C., Pickl, W. F., Majdic, O. & Knapp, W. (1998) J Immunol 161, 740-8

## Warranty

The products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, that extend beyond the description on the label of the product. Exalpha's sole liability is limited to either replacement of the products or refund of the purchase price. Exalpha is not liable for property damage, personal injury, or economic loss caused by the product.

#### **CE Mark**

CE

#### Safety Datasheet(s) for this product:

NM Sodium Azide