

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

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- Gefahrgutzuschlag
- Expressversand

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#### Product datasheet

# Mouse anti Lysozyme, conjugated to FITC

mordicmubio.com/products/Mouse-anti-Lysozyme-conjugated-to-FITC/GM-4132

Catalog number: GM-4132

Clone	LZ-2
Isotype	IgG1
Product Type	Primary Antibodies
Units	2ml (100 Tests)
Host	Mouse
Species Reactivity	Human
Application	Flow Cytometry

# Background

Lysozyme (LZ) is a cationic antimicrobial peptide of 14 kDa. Lysozyme is stored in primary but predominantly in specific (secondary) granules of neutrophils. It cleaves peptidoglycan constituents of the bacterial cell wall and can bind LPS. The epitope recognized by antibody LZ-2 is expressed by virtually all myeloid cells including normal and malignant granulocytes and monocytes. In normal myelopoiesis LZ can first be detected at the myeloblast stage where it appears somewhat later than MPO expression. The LZ-2 antibody permits the identification and enumeration of human myelomonocytic cells using flow cytometry. Results must be interpreted 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**

2 ml of FITC-conjugated anti Lysozyme (clone LZ-2) in PBS pH 7.2, 1% BSA, and 0.05% NaN3, approximately 100 tests.

Product Form: FITC

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

## **Specificity**

The anti-Lysozyme Antibody (clone LZ-2) reacts with intracellular human lysozyme/muramidase expressed by virtually all myelomonocytic cells, macrophages and their precursors. The sensitivity of LZ-2 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 an identical percentage of cells). In practice, 50 µl of leukocytes containing 10^7 cells/ml are stained with 20 µl 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 Lysozyme 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 5ml phosphate buffered saline and centrifuge cells for 5 minutes at 300 g - Remove supernatant and add to cell pellet 100 µl Reagent B (Permeabilization Medium) and 20 µl of the LZ-2 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

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. It 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. Braylan, R. C., Orfao, A., Borowitz, M. J. & Davis, B. H. (2001) Cytometry 46, 23-7. 2. Catovsky, D., Matutes, E., Buccheri, V., Shetty, V., Hanslip, J., Yoshida, N. & Morilla, R. (1991) Ann Hematol 62, 16-21. 3. Cowland, J. B. & Borregaard, N. (1999) J Leukoc Biol 66, 989-95. 4. Groeneveld, K., te Marvelde, J. G., van den Beemd, M. W., Hooijkaas, H. & van Dongen, J. J. (1996) Leukemia 10, 1383-9. 5. Konikova, E., Glasova, M., Kusenda, J. & Babusikova, O. (1998) Neoplasma 45, 282-91. 6. Lanza, F., Latorraca, A., Moretti, S., Castagnari, B., Ferrari, L. & Castoldi, G. (1997) Cytometry 30, 134-44. 7. Oehler, L., Majdic, O., Pickl, W. F., Stockl, J., Riedl, E., Drach, J., Rappersberger, K., Geissler, K. & Knapp, W. (1998) J Exp Med 187, 1019-28. 8. Paietta, E. (2003) Best Pract Res Clin Haematol 16, 671-83. 9. Strobl, H. & Knapp, W. (2004) J Biol Regul Homeost Agents 18, 335-9.

### 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.

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

NM Sodium Azide



Figure 1. Flow cytometric analysis of a normal blood sample after immunostaining with GM-4132 (Lysozyme-FITC)



Figure 2. Flow cytometric analysis of a normal blood sample after immunostaining with GM-4132 (Lysozyme-FITC)



Figure 3. Flow cytometric analysis of a blood sample after immunostaining with GM-4132 (Lysozyme-FITC)