SZABO SCANDIC

Part of Europa Biosite

# 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 CD14, conjugated to PE

nordicmubio.com/products/Mouse-anti-CD14-conjugated-to-PE/GM-4093-CE_slash_IVD

Catalog number: **GM-4093-CE/IVD**

| | |
|---|---|
| Clone | MEM18 |
| Isotype | IgG1 |
| Product Type | Primary Antibodies |
| Units | 2ml (100 Tests) |
| Host | Mouse |
| Species Reactivity | Human |
| Application | Direct Immunofluorescence<br>Flow Cytometry<br>Immunofluoresence |

**Background**
CD14 is a GPI-anchored molecule expressed by virtually all human monocytes and macrophages and – to a lesser degree - granulocytes. CD14 together with Toll-like receptor 4 and MD-2 forms the LPS-receptor complex that recognizes and signals the presence of LPS. While CD14 has no signaling structure its main role seems to be the binding of LPS. The MEM18 antibody permits the identification and enumeration of leukocytes using flow cytometry. MEM18 has been also used for functional studies since this antibody blocks the interaction of LPS with CD14 on monocytes. 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**
2 ml of PE-conjugated MEM18 in PBS pH 7.2, 1% BSA, and 0.05% NaN3, approximately 100 tests.

*Product Form:* PE

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

**Specificity**

The CD14 mAb (clone MEM18) recognizes surface CD14 on human monocytes and macrophages as well as on neutrophils. The sensitivity of MEM18 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**

Direct Immunofluorescence (Staining Procedure) Nordic-MUbio fluorochrome labeled antibodies are designed for use with either whole blood or isolated mononuclear cell (MNC) preparations. Proposed staining procedure for whole blood in short: - For each sample add 50 µl of EDTA anti-coagulated blood to a 3-5 ml tube - Add 20 µl of the appropriate Nordic-MUbio monoclonal antibody conjugate - Incubate the tube for 15 minutes at 4°C or at room temperature in the dark - Add 100 µl NM-LYSE (Cat.No. GAS-003) to each tube and incubate for 10 minutes at room temperature - Add 3-4 ml of destilled water and vortex, incubate for 5-10 minutes at room temperature - Centrifuge tube for 5 minutes at 300 g - Aspirate supernatant and resuspend pellet in 0.3 ml of sheath fluid - Analyze immediately or store samples at 2-8° C in the dark and analyze within 24 hours For “No-Wash” protocol please refer to www.nordicmubio.com Proposed staining procedure for MNC in short: - Carefully add 20 µl antibody conjugate and 50-100 µl MNC to the bottom of a tube - Vortex at low speed for 1-2 seconds - Incubate for 15-30 minutes at 2-8°C or at room temperature - Centrifuge tubes for 5 minutes at 300 g - Remove supernatant, resuspend cells in 2-5 ml of phosphate buffered saline (PBS) and centrifuge cells again for 5 minutes at 300 g - Remove supernatant and resuspend cells in sheath fluid for immediate analysis or resuspend cells in 0.5 ml 1 % formaldehyde and store them at 2-8°C in the dark. Analyze fixed cells within 24 hours Indirect Immunofluorescence (Staining Procedure) - Mix 20 µl Nordic-MUbio purified antibody with 50 µl whole blood or MNC suspension - Incubate for 15 minutes at 2-8°C - Wash cells with phosphate buffered saline (PBS) - Add to cell pellet 20 µl of affinity purified, fluorochrome labeled F(ab’)2 anti mouse Ig antibodies - Incubate for 15 minutes at 2-8°C - Wash cells with phosphate buffered saline (PBS) or proceed as described for direct staining

**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. Beutler, B. (2002) Curr Top Microbiol Immunol 270, 109-20. 2. Goyert, S. M. (1989) In Leukocyte Typing IV (Oxford University Press, Oxford-New York-Tokyo) p789-793 3. Goyert, S. M., Ferrero, E., Rettig, W. J., Yenamandra, A. K., Obata, F. & Le Beau, M. M. (1988) Science 239, 497-500. 4. Goyert, S. M., Ferrero, E. M., Seremetis, S. V., Winchester, R. J., Silver, J. & Mattison, A. C. (1986) J Immunol 137, 3909-14. 5. Juan, T. S., Hailman, E., Kelley, M. J., Busse, L. A., Davy, E., Empig, C. J., Narhi, L. O., Wright S. D. & Lichenstein, H. S. (1995) J Biol Chem 270, 5219-24. 6. Knapp, W. (1989) In Leukocyte typing IV (Oxford University Press, Oxford-New York-Tokyo) p747-780 7. Means, T. K., Lien, E., Yoshimura, A., Wang, S., Golenbock, D. T. & Fenton, M. J. (1999) J Immunol 163, 6748-55. 8. Zilberman, M., Goyert, S. M. & Vogel, S. N. (2001) J Immunol 166, 574-81. 9. Tapping, R. I., Akashi, S., Miyake, K., Godowski, P. J. & Tobias, P. S. (2000) J Immunol 165, 5780-7. 10. Ugolini, V., Nunez, G., Smith, R. G., Stastny, P. & Capra, J. D. (1980) Proc Natl Acad Sci U S A 77, 6764-8. 11. Yoshimura, A., Lien, E., Ingalls, R. R., Tuomanen, E., Dziarski, R. & Golenbock, D. (1999) J Immunol 163, 1-5.

**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**
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**Safety Datasheet(s) for this product:**
NM_Sodium Azide