

Monoclonal Antibody to CD14 - FITC

Alternate names: Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein

Catalog No.: SM1071F

Quantity: 0.1 mg

Concentration: 0.1 mg/ml

Background: The CD14 molecule is found predominantly on monocytes and macrophages in flow

cytometry, it is less strongly expressed on granulocytes, and is absent from stem cells and

myeloid cells of very early differentiation states.

 Uniprot ID:
 P08571

 NCBI:
 9606

Host / Isotype: Mouse / IgG2a

Clone: UCHM1

Immunogen: Human Thymocytes followed by peripheral blood mononuclear cells.

Spleen cells from mice immunised BALB/c mice were fused with cells from the NS1-Ag4/1

mouse myeloma line.

Format: State: Liquid purified IgG fraction.

Purification: Affinity Chromatography on Protein G

Buffer System: PBS containing 0.09% Sodium Azide as preservative and 1% BSA as

stabilizer.

Label: FITC - Fluorescein Isothiocyanate Isomer 1

Applications: Flow Cytometry: Use 10 μl of Neat-1/10 diluted antibody to label 10e6 cells or 100 μl whole

blood.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognises a cell surface antigen of 55 kD, known as CD14. Antibodies to the

CD14 molecule are known to induce oxidative burst formation. In tonsil tissue sections UCHM1 gives positive staining reactions with monocytic cells, the interfollicular tissue macrophages seen under the capsule, and dendritic reticulum cells. Skin Langerhans cells are always negative. UCHM1 also reacts with Kupffer cells and sinus lining cells on the liver.

Species: Human, Cynomolgus Monkey, Monkey, Rhesus Monkey.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

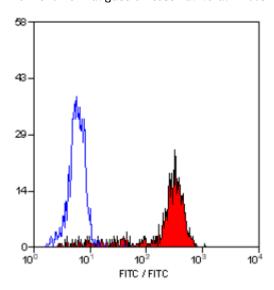
This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.



- General References: 1. Hogg, N. et al. (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. Immunol. 53: 753-768.
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 - 3. Hogg, N., and Horton, M.A. (1987) Myeloid antigens: new and previously defined clusters in Leucocyte Typing III White Cell differentiation antigens. Edited by McMichael, A.J., Beverley, P.C.L., Cobbold, S., Crumpton, M.J., Gilks, W., Gotch, F.M., Hogg, N., Horton, M., Ling, N., Mackenna, I.C.M., Mason, D.Y., Milstein, G., Speghelhalter., D. and Waldmann, H. et al.
 - 4. Jonker, M. et al. (1989) Reactivity of mAbs specific for human CD markers with Rhesus monkey leucocytes. Leucocyte Typing IV. Oxford University press p 1058-1063.
 - 5. Yoshino, N. et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (Macaca fascicularis) by using anti-human cross-reactive antibodies. Exp. Anim. 49 (2): 97-110.
 - 6. Angel, C.E. et al. (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. J. Immunol. 176: 5730-5734.
 - 7. Bournazos, S. et al. (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. Arterioscler Thromb Vasc Biol. 28: 1491-8.
 - 8. Hovden, A.O. et al. (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. BMC Immunol. 12:2.
 - 9. Hsu, T.L. et al. (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. J Immunol. 168: 4846-53.
 - 10. Karlsson, H. et al. (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. Infect Immun. 70: 6688-96.

Pictures:



Staining of human peripheral blood monocytes with Mouse Anti Human CD14-FITC