# TECHNICAL DATA SHEET

# CyFlow™ CD11b Low Endotoxin
# Anti-Hu; Clone ICRF44

REF **BY448764**

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

## Specifications

| | |
|---|---|
| **Antigen** | CD11b |
| **Alternative Names** | Mac-1 |
| **Clone** | ICRF44 |
| **Clonality** | monoclonal |
| **Format** | Low Endotoxin |
| **Host / Isotype** | Mouse / IgG1 |
| **Species Reactivity** | Human, Non-Human Primates |
| **Negative Species Reactivity** | — |
| **Quantity [Concentration]** | 0.1 mg [ 1 mg/ml ] |
| **Immunogen** | Rheumatoid synovial cells and human monocytes |

## Specificity

The mouse monoclonal antibody ICRF44 recognizes CD11b antigen, a 165-170 kDa type 1 transmembrane protein mainly expressed on monocytes, granulocytes and NK-cells.

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## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Immunohistochemistry (frozen sections)
- Immunocytochemistry
- Functional assays

## Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH ≈7.4; 0.2 µm filter sterilized. Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test.

## Storage and Stability

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|---|---|
| **Storage** | Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze. |
| **Stability** | Do not use after expiration date stamped on vial label. |

## Background Information

CD11b (integrin αM subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with CD18 (integrin β2 subunit); expression of the CD11b chain on the cell surface requires the presence of the CD18 antigen. CD11b/CD18 integrin (Mac-1, CR3) is highly expressed on NK cells, neutrophils, monocytes and less on macrophages. CD11b/CD18 integrin is implicated in various adhesive interactions of monocytes, macrophages and granulocytes, facilitating their diapedesis, as well as it mediates the uptake of complement coated particles, serving as a receptor for the iC3b fragment of the third complement component.

## References


- Sánchez-Torres C, García-Romo GS, Cornejo-Cortés MA, Rivas-Carvalho A, Sánchez-Schmitz G: CD16+ and CD16- human blood monocyte subsets differentiate in vitro to dendritic cells with different abilities to stimulate CD4+ T cells. Int Immunol. 2001 Dec; 13(12):1571-81. < PMID: 11717198 >
- Rezzonico R, Imbert V, Chicheportiche R, Dayer JM: Ligation of CD11b and CD11c beta(2) integrins by antibodies or soluble CD23 induces macrophage inflammatory protein 1alpha (MIP-1alpha) and MIP-1beta production in primary human monocytes through a pathway dependent on nuclear factor-kappaB. Blood. 2001 May 15; 97(10):2932-40. < PMID: 11342414 >



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- Hua J, Sakamoto K, Nagaoka I: Inhibitory actions of glucosamine, a therapeutic agent for osteoarthritis, on the functions of neutrophils. J Leukoc Biol. 2002 Apr; 71(4):632-40. < PMID: 11927650 >
- Masten BJ, Olson GK, Tarleton CA, Rund C, Schuyler M, Mehran R, Archibeque T, Lipscomb MF: Characterization of myeloid and plasmacytoid dendritic cells in human lung. J Immunol. 2006 Dec 1; 177(11):7784-93. < PMID: 17114449 >
- Tieu BC, Lee C, Sun H, Lejeune W, Recinos A 3rd, Ju X, Spratt H, Guo DC, Milewicz D, Tilton RG, Brasier AR: An adventitial IL-6/MCP1 amplification loop accelerates macrophage-mediated vascular inflammation leading to aortic dissection in mice. J Clin Invest. 2009 Dec; 119(12):3637-51. < PMID: 19920349 >


The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.


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