

TECHNICAL DATA SHEET

CyFlow™ CD11b Purified Anti-Hu; Clone ICRF44

REF BN086873

**For Research Use Only.
Not for use in diagnostic or therapeutic procedures.**

Specifications

Antigen	CD11b
Alternative Names	Mac-1
Clone	ICRF44
Clonality	monoclonal
Format	Purified
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

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

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.

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 phosphate buffered saline (PBS) solution, pH \approx 7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

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 α M subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with CD18 (integrin β 2 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

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 >
- 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com