

## 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

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| <b>Antigen</b>                     | CD11b                                         |
| <b>Alternative Names</b>           | Mac-1                                         |
| <b>Clone</b>                       | ICRF44                                        |
| <b>Clonality</b>                   | monoclonal                                    |
| <b>Format</b>                      | Purified                                      |
| <b>Host / Isotype</b>              | Mouse / IgG1                                  |
| <b>Species Reactivity</b>          | Human, Non-Human Primates                     |
| <b>Negative Species Reactivity</b> | —                                             |
| <b>Quantity [Concentration]</b>    | 0.1 mg [ 1 mg/ml ]                            |
| <b>Immunogen</b>                   | 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.

#### 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](mailto:info@sysmex-partec.com)

## 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

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

## Background Information

CD11b (integrin  $\alpha$ M subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with CD18 (integrin  $\beta$ 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.

## 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 >

---

### 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](mailto:info@sysmex-partec.com)

- 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](http://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](mailto:info@sysmex-partec.com)