

TECHNICAL DATA SHEET

CyFlow™ CD11b Azide Free Anti-Hu; Clone MEM-170

REF CB932683

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD11b
Alternative Names	Mac-1
Clone	MEM-170
Clonality	monoclonal
Format	Azide Free
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human granulocytes

Specificity

The mouse monoclonal antibody MEM-170 recognizes CD11b antigen, a 165-170 kDa transmembrane protein type 1 mainly expressed on monocytes, granulocytes and NK-cells. The antibody blocks (not completely) Mac-1-mediated neutrophil binding to fibrinogen.

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Application

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

- Flow cytometry
- Functional assays

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH $\approx$ 7.4; 0.2 μ m filter sterilized.

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.

References

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- Hentzen ER, Neelamegham S, Kansas GS, Benanti JA, McIntire LV, Smith CW, Simon SI: Sequential binding of CD11a/CD18 and CD11b/CD18 defines neutrophil capture and stable adhesion to intercellular adhesion molecule-1. Blood. 2000 Feb 1; 95(3):911-20. < PMID: 10648403 >
- Akramiene D, Kondrotas A, Didziapetriene J, Kevelaitis E: Effects of beta-glucans on the immune system. Medicina (Kaunas). 2007; 43(8):597-606. < PMID: 17895634 >

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- Lawrence PK, Srikumaran S: CD11b of *Ovis canadensis* and *Ovis aries*: molecular cloning and characterization. *Vet Immunol Immunopathol.* 2007 Oct 15; 119(3-4):287-98. < PMID: 17628696 >

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

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