

1B-211-C025

## Monoclonal Antibody to CD11b Biotin conjugated (0.025 mg)

<b>Clone:</b>	MEM-174
<b>Isotype:</b>	Mouse IgG2a
<b>Specificity:</b>	The antibody MEM-174 recognizes CD11b antigen (Mac-1 alpha), a 165-170 kDa type I transmembrane protein mainly expressed on monocytes, granulocytes and NK-cells. The CD11b mediates neutrophil and monocyte interactions with stimulated endothelium. HLDA VI; WS Code BP 310 HLDA VI; WS Code M 18
<b>Immunogen:</b>	Human granulocytes
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow Cytometry. Suggested working dilution is 1:400. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD11b (integrin alphaM subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with integrin beta2 subunit (CD18); 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.

**For laboratory research only, not for drug, diagnostic or other use.**



**Antibodies**

**References:**

- \*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.
- \*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.
- \*Akramiene D, Kondrotas A, Didziapetriene J, Kevelaitis E.: Effects of beta-glucans on the immune system. *Medicina (Kaunas)*. 2007;43(8):597-606.
- \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- \*Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. *Int Immunol*. 2007 May;19(5):675-84.

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