

1P-211-T025

Monoclonal Antibody to CD11b Phycoerythrin (PE) conjugated (25 tests)

Clone:	MEM-174
Isotype:	Mouse IgG2a
Specificity:	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
Immunogen:	Human granulocytes
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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.
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- *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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