

1P-681-T100

Monoclonal Antibody to CD11b Phycoerythrin (PE) conjugated (100 tests)

Clone:	ICRF44
lsotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody ICRF44 recognizes CD11b (Mac-1alpha), a 165-170 kDa type 1 transmembrane protein mainly expressed on monocytes, granulocytes and NK-cells. HLDA IV, WS Code M047
Regulatory Status:	RUO
Immunogen:	Rheumatoid synovial cells and human monocytes.
Species Reactivity:	Human, Non-Human Primates
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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
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.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 μ l reagent / 100 μ l of whole blood or 10 ⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 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.

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References:

*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.

*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.

*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.

*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.

*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.

*Machacek C, Supper V, Leksa V, Mitulovic G, Spittler A, Drbal K, Suchanek M, Ohradanova-Repic A, Stockinger H: Folate Receptor β Regulates Integrin CD11b/CD18 Adhesion of a Macrophage Subset to Collagen. J Immunol. 2016 Sep 15;197(6):2229-38.

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