

## Anti-Human CD11b Antibody, Clone ICRF44, PE



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## Antibodies

Mouse monoclonal IgG1 antibody  
against human, rhesus, cynomolgus  
CD11b, PE-conjugated

Catalog #60040PE  
#60040PE.1

100 Tests 5 µL/test  
25 Tests 5 µL/test

## Product Description

The ICRF44 antibody reacts with an extracellular epitope on CD11b (integrin  $\alpha$ M), an ~170 kDa type 1 transmembrane glycoprotein which associates non-covalently with CD18 to form the heterodimeric Mac-1 receptor. Through its interactions with ligands such as ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, heparin, and fibrinogen, Mac-1 influences several processes, including the adherence of neutrophils and monocytes to stimulated endothelium, and phagocytosis of complement-coated particles. CD11b is expressed on the surface of granulocytes, monocytes, NK cells, dendritic cells, tissue macrophages, and subsets of T and B cells, and has been used as a marker to distinguish naïve and memory CD8+ T cells. CD11b is a relatively late marker for myeloid differentiation, and is undetectable on most myelomonocytic hematopoietic progenitor cells and more primitive cells. Certain mutations in CD11b give rise to the disorder systemic lupus erythematosus. The ICRF44 antibody reportedly inhibits leukocyte aggregation in response to the chemoattractant fMLP.

Target Antigen Name:	CD11b
Alternative Names:	C3biR, CR3, Integrin $\alpha$ M chain, Mac-1, MAC1, Mo1
Gene ID:	3684
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Common Marmoset, Pig
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	ICRF44
Isotype:	IgG1, kappa
Immunogen:	Human rheumatoid synovial cells and monocytes
Conjugate:	PE (Phycoerythrin)

## Applications

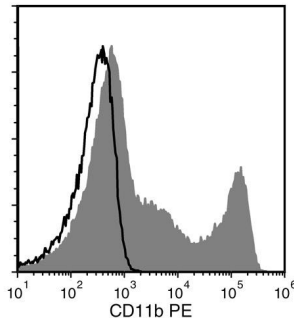
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Monocyte Enrichment Kit (Catalog #19059), and for labeling human mesenchymal cells grown in MesenCult™ Proliferation Kit (Human; Catalog #05411).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10 <sup>6</sup> cells in 100 µL or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD11b Antibody, Clone ICRF44, PE (filled histogram) or a mouse IgG1, kappa PE isotype control antibody (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Charles N et al. (2010) Basophils and the T helper 2 environment can promote the development of lupus nephritis. *Nat Med* 16(6): 701–7. (FC)
2. Moreau A et al. (2009) Tolerogenic dendritic cells actively inhibit T cells through heme oxygenase-1 in rodents and in nonhuman primates. *FASEB J* 23(9): 3070–7. (FC)
3. Sotiriou SN et al. (2006) Lipoprotein(a) in atherosclerotic plaques recruits inflammatory cells through interaction with Mac-1 integrin. *FASEB J* 20(3): 559–61. (IHC)
4. Sengoku K et al. (2004) Integrins are not involved in the process of human sperm-olemmal fusion. *Hum Reprod* 19(3): 639–44. (ICC, IF)
5. David A et al. (2003) Interaction of proteinase 3 with CD11b/CD18 (beta2 integrin) on the cell membrane of human neutrophils. *J Leukoc Biol* 74(4): 551–7. (IF)
6. Marsik C et al. (2003) Regulation of Fas (APO-1, CD95) and Fas ligand expression in leukocytes during systemic inflammation in humans. *Shock* 20(6): 493–6. (Blocking, FA)
7. Jadhav S et al. (2001) Hydrodynamic shear regulates the kinetics and receptor specificity of polymorphonuclear leukocyte-colon carcinoma cell adhesive interactions. *J Immunol* 167(10): 5986–93. (Blocking, FA)
8. Rezzonico R et al. (2001) 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* 97(10): 2932–40. (Blocking, FA)
9. Yoshino N et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp Anim* 49(2): 97–110. (FC)
10. Kishimoto T et al. (Eds.). (1998) *Leucocyte Typing VI: White cell differentiation antigens* (pp. 1117–8). New York: Garland Publishing Inc.

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