Anti-Human CD11b Antibody, Clone ICRF44, Alexa Fluor® 488

Antibodies

Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD11b, Alexa Fluor® 488-conjugated

Catalog #60040AD #60040AD.1 100 Tests 5 μL/test 25 Tests 5 μL/test



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Product Description

The ICRF44 antibody reacts with an extracellular epitope on CD11b (integrin αM), 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 aM 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: Alexa Fluor® 488

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 Alexa Fluor® 488 under optimal

conditions. The solution is free of unconjugated Alexa Fluor® 488.

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 techsupport@stemcell.com.

Directions for Use: For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10^6 cells in 100 µL or per 100 µL of

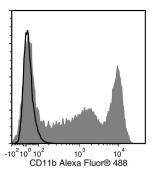
whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

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Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD11b Antibody, Clone ICRF44, Alexa Fluor® 488 (filled histogram) or a mouse IgG1, kappa Alexa Fluor® 488 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 or contact us at 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-oolemmal 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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