Anti-Human CD11b Antibody, Clone ICRF44, PE

Antibodies

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

Catalog	#60040PE.1	25 tests	5 µL/test
	#60040PE	100 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 naive 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 αM chain, Mac-1, 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

Applications

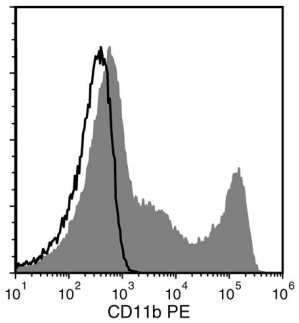
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for labeling human mesenchymal cells grown in MesenCult™ Proliferation Kit (Human; Catalog #05411) and MesenCult™-XF Medium (Catalog #05420).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; 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 request a lot-specific Certificate of Analysis from techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10e6 cells in 100 µL volume 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

PRODUCT NAME	CATALOG #	SIZE
Anti-Human CD11b Antibody, Clone ICRF44	60040	Coming soon
Anti-Human CD11b Antibody, Clone ICRF44, PE	60040PE.1	25 tests
Anti-Human CD11b Antibody, Clone ICRF44, PE	60040PE	100 tests
Anti-Human CD11b Antibody, Clone ICRF44, Alexa Fluor® 488	60040AD.1	25 tests
Anti-Human CD11b Antibody, Clone ICRF44, Alexa Fluor® 488	60040AD	100 tests

References

1. Kishimoto T, et al. Eds. Leukocyte Typing VI. White Cell Differentiation Antigens. Garland Publishing Inc, New York, pp. 1117-18, 1998
2. Yoshino N, et al. 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, 2000 (FC)
3. Jadhav S, et al. Hydrodynamic shear regulates the kinetics and receptor specificity of polymorphonuclear leukocyte-colon carcinoma cell adhesive interactions. Blood 167(10): 5986-93, 2001 (Blocking, FA)
4. Rezzonico R, et al. 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, 2001 (Blocking, FA)
5. David A, et al. Interaction of proteinase 3 with CD11b/CD18 (beta2 integrin) on the cell membrane of human neutrophils. J Leukoc Biol 74(4): 551-57, 2003 (IF)
6. Marsik C, et al. Regulation of Fas (APO-1, CD95) and Fas ligand expression in leukocytes during systemic inflammation in humans. Shock 20(6): 493-96, 2003 (Blocking, FA)
7. Sengoku K, et al. Integrins are not involved in the process of human sperm-oolemmal fusion. Hum Reprod 19(3): 639-44, 2004 (ICC, IF)
8. Sotiriou SN, et al. Lipoprotein(a) in atherosclerotic plaques recruits inflammatory cells through interaction with Mac-1 integrin. FASEB J 20(3): 559-61, 2006 (IHC)
9. Moreau A, et al. Tolerogenic dendritic cells actively inhibit T cells through heme oxygenase-1 in rodents and in nonhuman primates. FASEB J 23(9): 3070-77, 2009 (FC)
10. Charles N, et al. Basophils and the T helper 2 environment can promote the development of lupus nephritis. Nat Med 16(6): 701-07, 2010 (FC)