SONY

Product Data Sheet

APC/Cyanine7 anti-human CD11b

Catalog # / Size: 2106710 / 100 tests
2106705 / 25 tests

Clone: ICRF44

Isotype: Mouse IgG1, κ

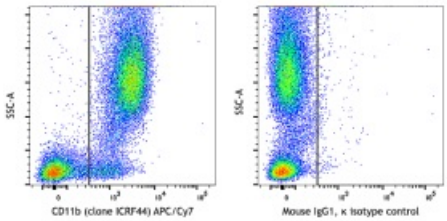
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Cy7 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: IV M047

Concentration: Lot-specific



Human peripheral blood lymphocytes, monocytes, and granulocytes were stained with CD11b (clone ICRF44) APC/Cy7 (left) or mouse IgG1, κ APC/Cy7 isotype control (right).

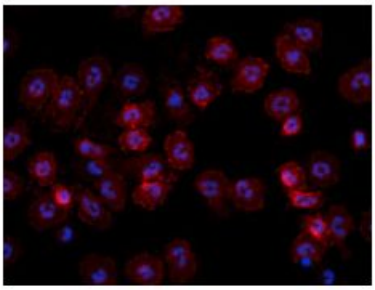
Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: The ICRF44 antibody inhibits heterotypic adhesion of granulocytes in response to fMLP. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections, immunofluorescence microscopy5, stimulation of monocytes3, blocking of heterotypic PMN aggregation[8], and blocking of granulocyte activation[12]. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301312).



Human neutrophils were fixed with 1% paraformaldehyde (PFA) and then stained with 10 µg/ml CD11b (clone ICRF44) Brilliant Violet 510™ (red). Nuclei were counterstained with DRAQ5™ (blue). The image was captured with a 40X objective.

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Application References:

1. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
3. Rezzonico R, *et al.* 2001. *Blood* 97:2932. (Stim)
4. Marsik C, *et al.* 2003. *Shock* 20:493. (FC)
5. David A, *et al.* 2003. *J. Leukoc. Biol.* 74:551. (IF)
6. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) PubMed
7. Thurlow LR, *et al.* 2010. *Infect. Immun.* 128:1128. (FC) PubMed
8. Jadhav S, *et al.* 2001. *J. Immunol.* 167:5986. (Block)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
10. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21. (FC)
11. Wen T, *et al.* 2014. *J Immunol.* 192:5481. (FC) PubMed
12. Sprong T, *et al.* 2003. *Blood* 102:3702. (Block)
13. Cash JL, *et al.* 2013. *EMBO Rep.* 14:999. (FC) PubMed
14. Larsson K, *et al.* 2015. *PNAS.* PubMed

Description: CD11b is a 165-170 kD type I transmembrane glycoprotein also known as α_M integrin, Mac-1, CR3, and C3biR. CD11b non-covalently associates with integrin β_2 (CD18) and is expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b/CD18 is critical for the transendothelial migration of monocytes and neutrophils. It is also involved in granulocyte adhesion, phagocytosis, and neutrophil activation. CD11b/CD18 interacts with ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4, CD14, CD23, heparin, iC3b, fibrinogen, and factor X.

Antigen References:

1. Stewart M, *et al.* 1995. *Curr. Opin. Cell Biol.* 7:690.

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