

## **Product Data Sheet**

## Alexa Fluor® 647 anti-human CD11b

Catalog # / Size: 301319 / 25 tests

Clone: ICRF44

**Isotype:** Mouse IgG1,  $\kappa$ 

Workshop Number: IV M047

Reactivity: Human, Cross-Reactivity: Chimpanzee, Baboon, Cynomolgus, Rhesus,

Common Marmoset, Swine (Pig, Porcine)

Preparation: The antibody was purified by affinity chromatography, and conjugated with

Alexa Fluor® 647 under optimal conditions. The solution is free of

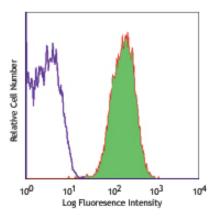
unconjugated Alexa Fluor® 647.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood granulocytes stained with ICRF44 Alexa Fluor®

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent 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.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

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 microscopy<sup>5</sup>, and blocking of granulocyte activation<sup>3,4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 301312).

- 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. (Block)

  - Kezzonico K, et al. 2001. Biodd 91.2932. (Block)
    Marsik C, et al. 2003. Shock 20:493. (Block)
    David A, et al. 2003. J. Leukoc. Biol. 74:551. (IF)
    Charles N, et al. 2010. Nat. Med. 16:701. (FC) PubMed
    Thurlow LR, et al. 2010. Infect. Immun. 128:1128. PubMed
    Jadhav S, et al. 2001. Biodd 167:5986. (Block)

  - 9. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC) 10. Sestak K, et al. 2007. Vet. Immunol. Immunop. 119:21.

**Description:** CD11b is a 165-170 kD type I transmembrane glycoprotein also known as  $\alpha_M$  integrin, Mac-1, CR3, and C3biR.

CD11b non-covalently associates with integrin  $\beta_2$  (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, fibringen, and Factor X.

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

**Application Related Products: Product** Clone

FC, ICC, ICFC FC, IF Cell Staining Buffer Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (FC) MOPC-21

FC, ICC, ICFC Human TruStain FcX™ (Fc Receptor Blocking Solution)



