

# Product Data Sheet

## Alexa Fluor® 647 anti-human CD11a

**Catalog # / Size:** 301217 / 25 tests  
301218 / 100 tests

**Clone:** HI111

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

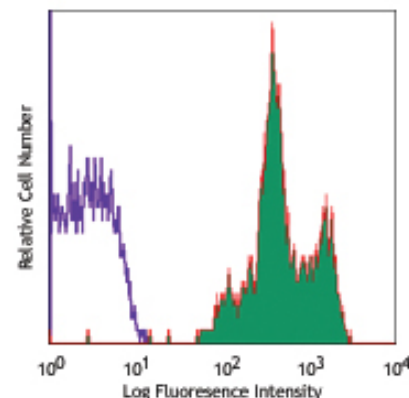
**Workshop Number:** IV N231

**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Capuchin Monkey, Horse (Equine), Cattle (Bovine, Cow), Sheep (Ovine), Dog (Canine), Rabbit (Lapine)

**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 lymphocytes stained with HI111 Alexa Fluor® 647

## 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  $\mu$ l per million cells or 5  $\mu$ l per 100  $\mu$ l 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:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections, Western blotting<sup>2</sup>, and blocking of cell-cell interaction and inhibition the binding of ICAM-1<sup>4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 301214).

**Application References:**

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Leite F, *et al.* 2002. *Infect. Immun.* 70:4336.
3. Jiang Y, *et al.* 2005. *Clin. Hemorheol. Microcircul.* 32:261.
4. Bécharde D, *et al.* 2001. *J. Immunol.* 167:3099.
5. Sithu SD, *et al.* 2007. *J. Biol. Chem.* doi:10.1074/jbc.M611273200.
6. Choi EY, *et al.* 2008. *Blood* 111:3607. PubMed
7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

**Description:** CD11a is a 170-180 kD type I transmembrane glycoprotein also known as LFA-1 $\alpha$  chain and integrin  $\alpha_L$  subunit. CD11a non-covalently associates with integrin  $\beta_2$  (CD18) to form LFA-1. It is expressed on all leukocytes, including B and T lymphocytes, monocytes, macrophages, neutrophils, basophils and eosinophils. It is absent on non-hematopoietic tissues and platelets. CD11a plays a central role in leukocyte cell-cell interactions and is important in lymphocyte costimulation. CD11a/CD18 binds to ICAM-1 (CD54), ICAM-2 (CD102), and ICAM-3 (CD50).

**Antigen References:**

1. Lub M, *et al.* 1995. *Immunol. Today* 16:479.
2. Parsons J. 1996. *Curr. Opin. Cell Biol.* 8:146.

**Related Products:**

Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
Alexa Fluor® 647 Mouse IgG1, $\kappa$ Isotype Ctrl (FC)	MOPC-21	FC, IF
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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