

## PE anti-human CD11a

**Catalog # / Size:** 2106035 / 25 tests  
2106040 / 100 tests

**Clone:** HI111

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

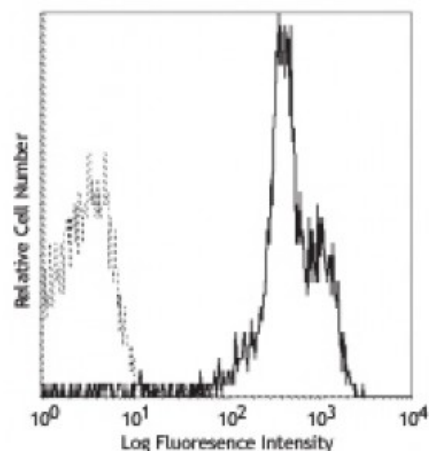
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** IV N231

**Concentration:** Lot-specific



Human peripheral blood lymphocytes stained with HI111 PE

## Applications:

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Clone HI111 epitope maps to the top region of the I domain that is close to the putative ligand-binding site surrounding the MIDAS (metal ion-dependent adhesion site). HI111 is specific for the closed confirmation of the integrin.<sup>8</sup> 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-14. 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. 301214).

**Application References:**

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Leite F, *et al.* 2002. *Infec. Immun.* 70:4336.
3. Jiang Y, *et al.* 2005. *Clin. Hemorheol. Microcircul.* 32:261.
4. Béchard 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)
8. Ma Q, *et al.* 2002. *J. Biol. Chem.* 277:10638.

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