

**PE/Cy7 anti-human CD11a**

**Catalog # / Size:** 2106100 / 100 tests  
2106095 / 25 tests

**Clone:** HI111

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

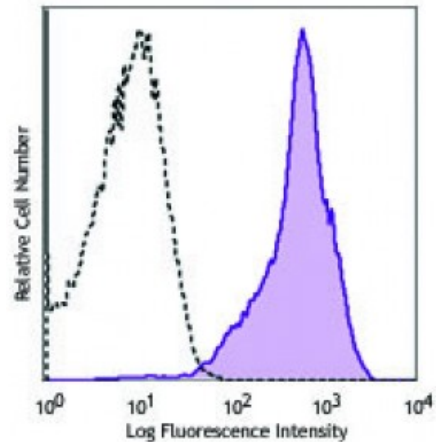
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 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 were stained CD11a (clone HI111) PE/Cy7 (filled histogram) or mouse IgG1,  $\kappa$  PE/Cy7 isotype control (open histogram).

**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 microL per million cells or 5 microL 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/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 301214).

**Application References:**

- Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press New York.
- Leite F, *et al.* 2002. *Infec. Immun.* 70:4336.
- Jiang Y, *et al.* 2005. *Clin. Hemorheol. Microcircul.* 32:261.
- Bécharde D, *et al.* 2001. *J. Immunol.* 167:3099.
- Sithu SD, *et al.* 2007. *J. Biol. Chem.* doi:10.1074/jbc.M611273200.
- Choi EY, *et al.* 2008. *Blood* 111:3607. [PubMed](#)
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- 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**
- References:**
1. Lub M, *et al.* 1995. *Immunol. Today* 16:479.
  2. Parsons J. 1996. *Curr. Opin. Cell Biol.* 8:146.