

**Purified anti-human CD49b**

**Catalog # / Size:** 2396505 / 50 µg  
2396510 / 500 µg

**Clone:** P1E6-C5

**Isotype:** Mouse IgG1, κ

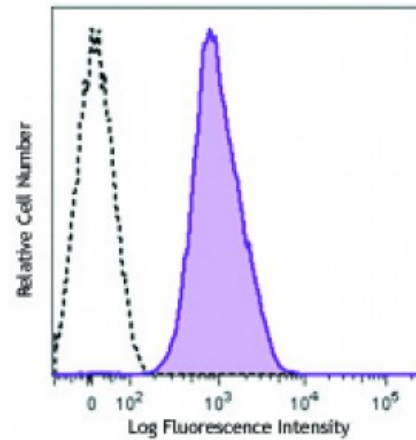
**Immunogen:** HT1080 cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

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

**Concentration:** 0.5



Human peripheral blood platelets stained with purified CD49b (clone P1E6-C5) or purified mouse IgG1, κ isotype control, followed by anti-mouse IgG PE.

**Applications:**

**Applications:** Other

**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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats of this clone) include: *in vitro* blocking activity<sup>1,2</sup>, immunoprecipitation<sup>3</sup>, and ELISA<sup>4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional studies (Cat. No. 359304).

- Application References:**
1. Hirsch MS, *et al.* 1997. *Dev. Dyn.* 210:249. (Block)
  2. Sawhney RS, *et al.* 2006. *J. Biol. Chem.* 281:8497. (Block)
  3. Lee SA, *et al.* 2009. *Carcinogenesis.* 30:1872. (IP)
  4. Zárate S, *et al.* 2004. *J. Virol.* 78:10839. (ELISA)

**Description:** CD49b is a 170 kD transmembrane protein, also known as α<sub>2</sub> integrin, VLA-2 α chain, Integrin α<sub>2</sub> and GPIa. It associates with CD29 (β<sub>1</sub> integrin) to form VLA-2, a collagen and laminin receptor on many cell types including monocytes, platelets, activated T cells, megakaryocytes, neuronal cells, epithelial cells, and osteoclasts. CD49b has been reported to interact with F-actin and matrix metalloproteinase 1. CD49b is a platelet alloantigen and has been associated with neonatal alloimmune thrombocytopenia. Deficiencies in this protein have been associated with hemorrhagic disorders.

- Antigen References:**
1. Kaplan C, *et al.* 1991. *Br. J. Haematol.* 78:425.
  2. Kiefel V, *et al.* 1991. *Vox Sang.* 60:244.
  3. Nieuwenhuis HK, *et al.* 1985. *Nature* 318:470.
  4. Takada Y and Helmer ME. 1989.