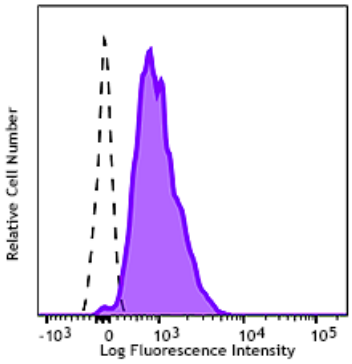
SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-human CD49b

Catalog # / Size:	2396580 / 100 tests 2396575 / 25 tests
Clone:	P1E6-C5
Isotype:	Mouse IgG1, κ
Immunogen:	HT1080 cells
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cyanine5.5 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Concentration:	Lot-specific



Human peripheral blood platelets were stained with CD49b (clone P1E6-C5) PerCP/Cyanine5.5 (filled histogram) or mouse IgG1, κ PerCP/Cyanine5.5 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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes:	Additional reported applications (for the relevant formats of this clone) include: *in vitro* blocking activity[1,2], immunoprecipitation[3], and ELISA[4].

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. *Carcinogensis.* 30:1872. (IP)
4. Zßrate S, *et al.* 2004. *J. Virol.* 78:10839. (ELISA)

Description: CD49b is a 170 kD transmembrane protein, also known as α_2 integrin, VLA-2 α chain, Integrin α_2 and GPIa. It associates with CD29 (β_1 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. *J. Cell Biol.* 109:397.

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