

PE/Cyanine7 anti-human CD49b

Catalog # / 2396570 / 100 tests
Size: 2396565 / 25 tests

Clone: P1E6-C5

Isotype: Mouse IgG1, κ

Immunogen: HT1080 cells

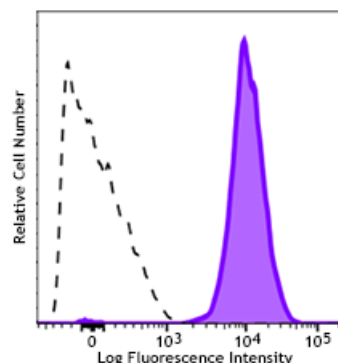
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions. The solution is free of unconjugated PE/Cyanine7 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: III 155

Concentration: Lot-specific



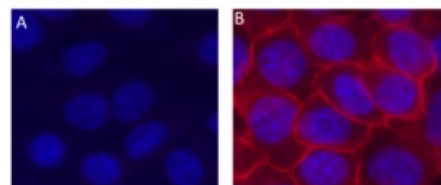
Human peripheral blood platelets were stained with CD49b (clone P1E6-C5) PE/Cyanine7 (filled histogram) or mouse IgG1, κ PE/Cyanine7 isotype control (open histogram).

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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. 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^{1,2}, immunoprecipitation³, and ELISA⁴.



A-431 cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with ice-cold methanol for 10 minutes, and blocked with 5% FBS for 60 minutes. Cells were then intracellularly stained with 5.0 μ g/mL (1:100 dilution) of either Purified Mouse IgG1, κ Isotype Ctrl Antibody (Cat. No. 2607010, panel A) or purified anti-EGFR antibody (panel B) for two hours at room temperature, followed by incubation with Alexa Fluor® 594 Goat anti-mouse IgG Antibody at 2.0 μ g/mL. Nuclei were counterstained with DAPI, and the image was captured with a 60X objective.

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. Zßrate S, *et al.* 2004. *J. Virol.* 78:10839. (ELISA)
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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.