

Alexa Fluor® 488 anti-human CD49b

Catalog # / Size: 314308 / 100 tests

Clone: AK-7

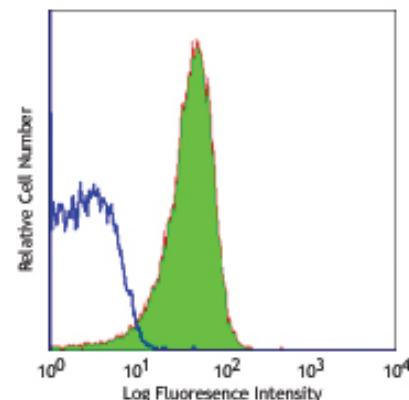
Isotype: Mouse IgG1, κ

Reactivity: Human, **Cross-Reactivity:** Baboon, Capuchin, Chimpanzee, Cynomolgus, Rhesus

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

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

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood platelets stained with AK-7 Alexa Fluor® 488

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5 μ l per million cells 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.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections, and functional assay. The LEAF™ format is suggested for functional studies.

Application References:

1. Kishimoto T, *et al.* Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.
2. Kirkland SC, *et al.* 2008. *J. Biol. Chem.* 283:27612. PubMed
3. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

Description: CD49b is a 170 kD transmembrane protein, also known as α_2 integrin, VLA-2 α chain, Integrin α_2 or GPIa. It associates with CD29 (β_1 integrin) to form VLA-2, a collagen and alminin 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. Haemat.* 78:425
2. Kiefel V, *et al.* 1991. *Vox Sang.* 60:244.
3. Nieuwenhuis HK, *et al.* 1985. *Nature* 318:470.
4. Takada Y, *et al.* 1989. *J. Cell Biol.* 109:397.

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Alexa Fluor® 488 Mouse IgG1, κ Isotype Ctrl (FC)	MOPC-21	FC, IF
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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