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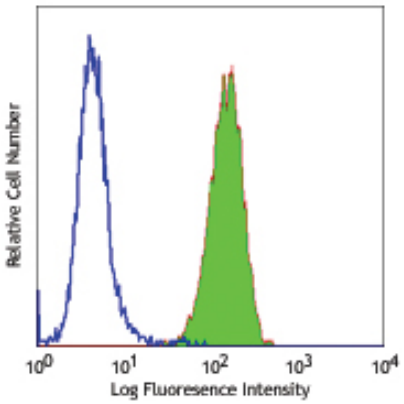
Product Data Sheet

Alexa Fluor® 488 anti-human CD51/61

Catalog # / Size: 304408 / 100 tests
Clone: 23C6
Isotype: Mouse IgG1, κ
Workshop Number: V S246
Reactivity: Human, **Cross-Reactivity:** Rabbit (Lapine), Chicken[3]
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 melanoma cell line M21 stained with 23C6 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 µl per million cells or 5 µl per 100 µl 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: immunoprecipitation[5], immunohistochemical staining of acetone-fixed frozen tissue sections[5], immunofluorescence microscopy[5], and blocking of cell adhesion[4,6]. The LEAF™ Purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 304414).

Application References:
1. Knapp WB, *et al.* 1989. Leucocyte Typing IV Oxford University Press. New York.
2. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
3. Horton M, *et al.* 1991. *Exp. Cell Res.* 195:368.
4. Takahashi R, *et al.* 1999. *Blood* 93:1951. (Block)
5. Davies J, *et al.* 1989. *J. Cell Biol.* 109:1817. (IF, IHC, IP)
6. Deregibus MC, *et al.* 2007. *Blood* doi:10.1182/blood-2007-03-078709. (FC, Block)
7. Barau A, *et al.* 2010. *J. Ultrasound Med.* 29:173. PubMed

Description: CD51/CD61 is an integrin complex known as $\alpha_V\beta_3$. It is expressed at high levels on osteoclasts, endothelial cells, and melanoma cells and at low levels on platelets and macrophages. CD51 is a heterodimer composed of disulfide-linked 125 kD and 24 kD proteins. CD61 is also a member of the integrin family known as gpIIIa or β_3 integrin. It is a 110 kD common β subunit of CD51/CD61 or CD41/CD61 complex. CD51/CD61, also known as the vitronectin receptor, mediates the binding of platelets to immobilized vitronectin without prior activation. Other ligands include RGD-containing proteins such as fibrinogen, fibronectin, von Willebrand factor (vWf), laminin, thrombospondin and the neural adhesion molecule L1. CD51/CD61 also mediates cell-cell adhesion via interaction with CD31. CD51/CD61 acts as an activation-independent receptor for platelet attachment and spreading on vitronectin and other RGD-containing proteins, including matrix components. The 23C6 antibody has been reported to be useful for blocking studies.

Antigen References:
1. Davies J, *et al.* 1989. *J. Cell Biol.* 109:1817.
2. Nesbitt S, *et al.* 1993. *J. Biol. Chem.* 268:16737.

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

BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587