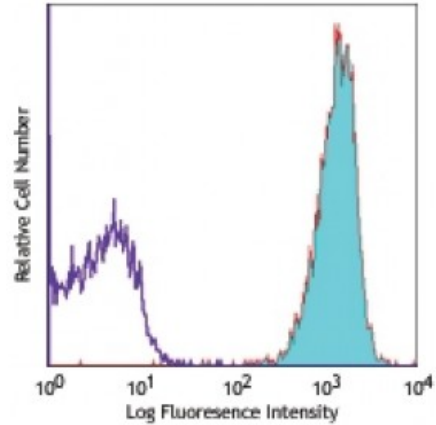


Alexa Fluor® 647 anti-human CD51/61

Catalog # / Size: 2122050 / 100 tests
Clone: 23C6
Isotype: Mouse IgG1, κ
Reactivity: Human
Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Workshop Number: V S246
Concentration: Lot-specific



Human melanoma cell line M21 stained with 23C6 Alexa Fluor® 647

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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation⁵, immunohistochemical staining of acetone-fixed frozen tissue sections⁵, immunofluorescence microscopy⁵, 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 α_vβ₃. 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 β₃ 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** 1. Davies J, *et al.* 1989. *J. Cell Biol.* 109:1817.
References: 2. Nesbitt S, *et al.* 1993. *J. Biol. Chem.* 268:16737.