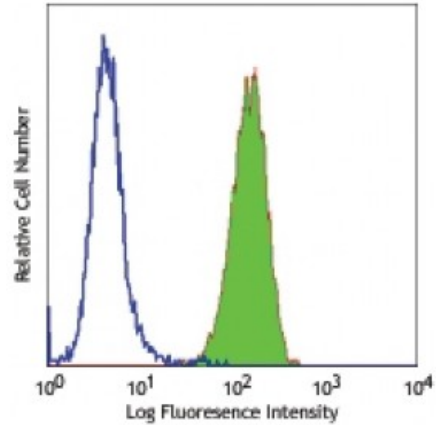


**Alexa Fluor® 488 anti-human CD51/61**

**Catalog # / Size:** 2122040 / 100 tests  
**Clone:** 23C6  
**Isotype:** Mouse IgG1, κ  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 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® 488

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

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>5</sup>, immunohistochemical staining of acetone-fixed frozen tissue sections<sup>5</sup>, immunofluorescence microscopy<sup>5</sup>, and blocking of cell adhesion<sup>4,6</sup>. 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<sub>v</sub>β<sub>3</sub>. 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<sub>3</sub> 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.