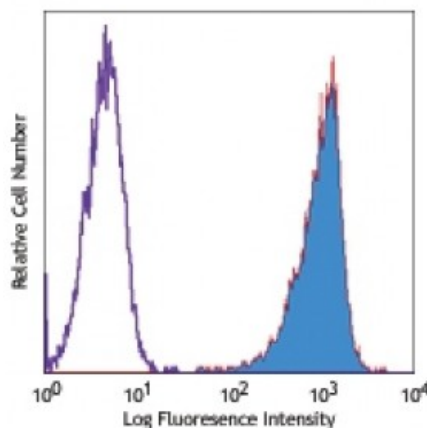


**Biotin anti-human CD51/61**

<b>Catalog # / Size:</b>	2122060 / 100 µg
<b>Clone:</b>	23C6
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Workshop Number:</b>	V S246
<b>Concentration:</b>	0.5



Human melanoma cell line M21 stained with biotinylated 23C6, followed by Sav-PE

**Applications:**

**Applications:** Flow Cytometry, Immunohistochemistry

**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 ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**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  $\alpha_v\beta_3$ . 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  $\beta_3$  integrin. It is a 110 kD common  $\beta$  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.