

APC anti-human CD51/61

Catalog # / Size:	2122080 / 100 tests 2122075 / 25 tests	□ Human melanoma cell line M21 stained with CD51/61 (clone 23C6) APC (filled histogram) or mouse IgG1 APC Isotype control (open histogram).
Clone:	23C6	
Isotype:	Mouse IgG1, κ	
Immunogen:	Armenian hamster fibroblast line ARHO12 transfected with mouse CD27 cDNA	
Reactivity:	Human, Non-human primate, Other	
Preparation:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.	
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	

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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.

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}.

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