BioLegend
The path to legendary discovery™

Product Data Sheet

FITC anti-human CD51/61

Catalog # / Size: 304403 / 25 tests
304404 / 100 tests

Clone: 23C6

Isotype: Mouse IgG1, κ

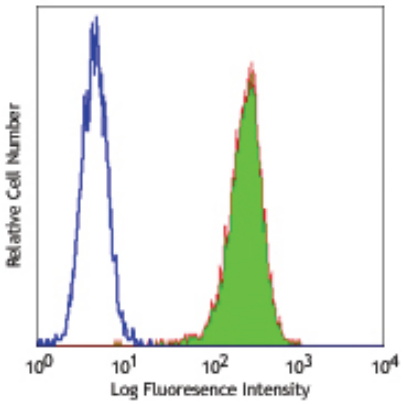
Workshop Number: V S246

Reactivity: Human, **Cross-Reactivity:** Rabbit (Lapine), Chicken[3]

Preparation: The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

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 FITC

Applications:

Applications: FC - *Quality tested*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

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
8. Wu W, *et al.* 2013. *J Lipid Res.* 54:936. 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
FITC Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
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