SONY

Product Data Sheet

Purified anti-human CD51/61

Catalog # / Size: 2122010 / 100 µg

Clone: 23C6

Isotype: Mouse IgG1, κ

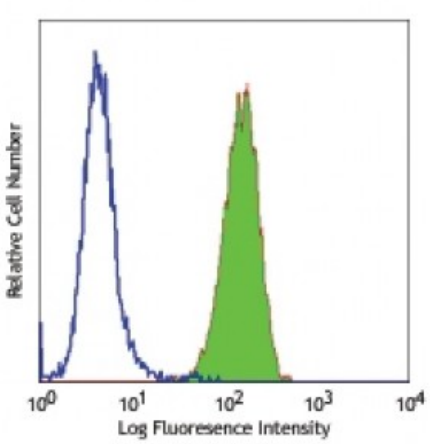
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: V S246

Concentration: 0.5



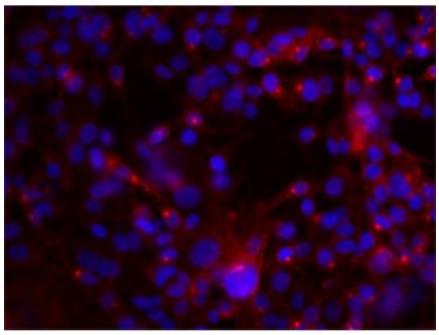
Human melanoma cell line M21 stained with purified 23C6, followed by anti-mouse IgGs FITC

Applications:

Applications: Other

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 ≤0.5 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: 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).



MDA-MB231 breast cancer cell line was stained with anti-human CD51/61, detected with anti-mouse DyLight™ 649, and nuclear counterstained with DAPI. Images were acquired with a TE300 fluorescence microscope with a 20x objective. Data provided by: Er

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 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.