

Alexa Fluor® 647 anti-mouse/rat CD61

Catalog # / Size: 1121565 / 25 µg
1121570 / 100 µg

Clone: 2C9.G2 (HMβ3-1)

Isotype: Hamster IgG

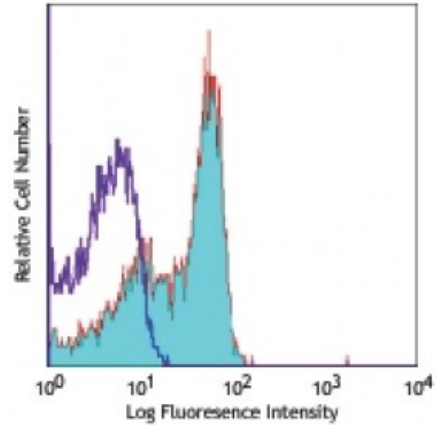
Immunogen: Vitronectin receptor protein from the mouse T-cell hybridoma 2B4

Reactivity: Mouse,Rat

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

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

Concentration: 0.5



C57BL/6 mouse bone marrow cells stained with 2C9.G2 Alexa Fluor® 647

Applications:

Applications: Immunofluorescence

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 ≤ 0.25 microg per 10⁶ cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

Application Notes: Additional reported applications (for the relevant formats) include: blocking of ligand binding¹⁻⁴, activation of α_v β₃ integrin signaling⁵, and immunohistochemical staining of acetone-fixed frozen sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 104310).

- Application References:**
1. Kieffer N, *et al.* 1990. *Annu. Rev. Cell Biol.* 6:329. (Block)
 2. Piali L, *et al.* 1995. *J. Cell Biol.* 130:451. (Block)
 3. Ashkar S, *et al.* 2000. *Science* 287:860. (Block)
 4. Schultz JF, *et al.* 1995. *J. Biol. Chem.* 270:11522. (Block)
 5. Moulder K, *et al.* 1991. *J. Exp. Med.* 173:343. (Activ)
 6. Carlson TR, *et al.* 2008.135:2193. [PubMed](#)
 7. Yamaji D, *et al.* 2009. *Genes Dev.* 23:2382. [PubMed](#)
 8. Ladilaw TM, *et al.* 2012. *Blood.* 119:3790. [PubMed](#)
 9. Elsarrai HS, *et al.* 2013. *J Cell Sci.* 126:2446. [PubMed](#)

Description: CD61 is a 110 kD integrin β chain also known as β₃ integrin or gpIIIa. It associates with the integrin α_v chain (CD51) to form the vitronectin receptor. In addition, CD61 can associate with the integrin α_{IIb} chain (CD41) to form the gpIIb/IIIa complex. CD61 is expressed on platelets, megakaryocytes, endothelium, smooth muscle, a subset of B cells, myeloid cells, osteoclasts, and mast cells. CD61, in conjunction with CD41 or CD51, mediates adhesion to fibronectin, fibrinogen, vitronectin, thrombospondin, and von Willebrand factor. Leukocyte-endothelial

adhesion is mediated by the binding of α_v/β_3 integrin or vitronectin receptor to CD31 (PECAM-1).

**Antigen
References:**

1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook. Academic Press.
2. Phillips DR, *et al.* 1991. *Cell* 65:359.
3. Felding-Habermann B, *et al.* 1993. *Curr. Opinion Cell Biol.* 5:864.