

**Alexa Fluor® 647 anti-mouse/rat CD61**

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

**Clone:** 2C9.G2 (HMβ3-1)

**Isotype:** Hamster IgG

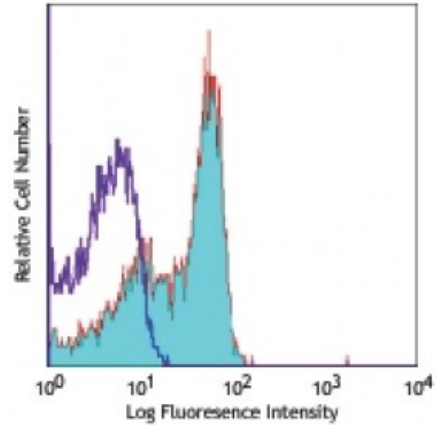
**Immunogen:** Vitronectin receptor protein from the mouse T-cell hybridoma 2B4

**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 10<sup>6</sup> 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 binding<sup>1-4</sup>, activation of α<sub>v</sub> β<sub>3</sub> integrin signaling<sup>5</sup>, 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 β<sub>3</sub> integrin or gpIIIa. It associates with the integrin α<sub>v</sub> chain (CD51) to form the vitronectin receptor. In addition, CD61 can associate with the integrin α<sub>IIb</sub> 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  $\alpha_v/\beta_3$  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.