

**Alexa Fluor® 647 anti-human CD202b (Tie2/Tek)**

**Catalog # / Size:** 2271050 / 100 tests  
2271045 / 25 tests

**Clone:** 33.1 (Ab33)

**Isotype:** Mouse IgG1 κ

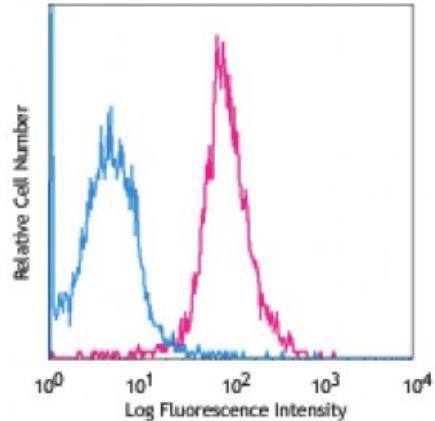
**Immunogen:** Recombinant extracellular domain of human Tie2

**Reactivity:** Human

**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 and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human endothelial cell line, HUVEC, stained with 33.1 Alexa Fluor® 647

**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 microL per million cells or 5 microL per 100 microL of whole blood. 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 include: immunoprecipitation, Western blot, immunohistochemical staining of frozen tissue sections and ELISA

**Application References:**

1. Peters KG, *et al.* 1998. *Br. J. Cancer.* 77:51.
2. Wong AL, *et al.* 1997. *Circ. Res.* 81:567.
3. Lin P, *et al.* 1998. *P. Natl. Acad. Sci. USA* 95:8829.
4. Rogacev KS, *et al.* 2015. *Nephrol Dial Transplant.* 30:143. [PubMed](#)

**Description:** CD202b is a 145 kD type I transmembrane protein, also known as Tie2 or TEK. It is a member of the receptor tyrosine kinase (RTK) family of proteins and is expressed by endothelial cells and their progenitors, quiescent hematopoietic stem cells (HSCs), and a subpopulation of monocytes. Angiopoietin-1 (Ang-1) is an activator of CD202b to promote, maintain, and stabilize mature vessels and to maintain HSCs in quiescent state. Ang-2 is another ligand of CD202b, which is involved in postnatal angiogenesis and in antagonizing the effects of Ang-1. Tie2 binds to Ang-4 as well.

**Antigen References:**

1. De Palma M, *et al.* 2005. *Cancer Cell.* 8:211
2. Shaw JP, *et al.* 2004. *Blood Cells Mol. Dis.* 32:168
3. Hsu HC, *et al.* 2000. *Blood.* 96:3757
4. Arai F, *et al.* 2004. *Cell.*