

**Purified anti-mouse CD34**

**Catalog # / Size:** 1196505 / 50 µg  
1196510 / 500 µg

**Clone:** MEC14.7

**Isotype:** Rat IgG2a, κ

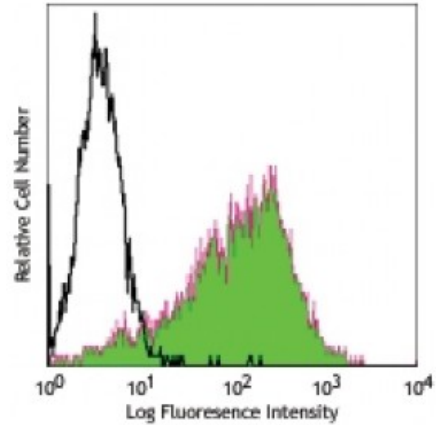
**Immunogen:** Cells transfected with mouse CD34

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography.

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

**Concentration:** 0.5



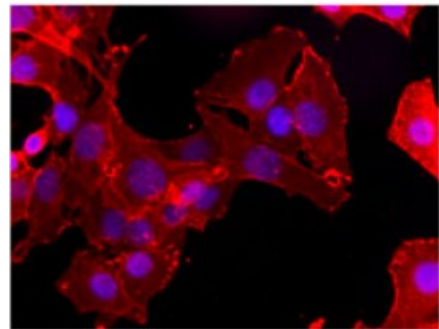
Mouse NIH/3T3 cell line stained with purified MEC14.7, followed with biotinylated anti-rat IgG and Sav-PE

**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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** The MEC14.7 antibody does not stain bone marrow cells like some other mouse CD34 antibodies, probably because the antibody recognizes a different epitope from other mAbs. Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting<sup>6</sup>, and immunohistochemistry of acetone-fixed frozen sections and paraffin-embedded sections<sup>2,4,5,6</sup>.



NIH3T3 cells were fixed with 1% PFA and then stained with 10 microg/1ml purified CD34 (clone MEC14.7) for 3 hours at room temperature. The cells were then stained with 2.5 mg/ml anti-rat IgG Dylight™ 594 secondary antibody (red) for 1 hours at roo

- Application References:**
1. Garlanda C, *et al.* 1997. *Eur. J. Cell Biol.* 73:368. (FC)
  2. Knowles HJ, *et al.* 2004. *Circ. Res.* 95:162. (IHC)
  3. Trempus CS, *et al.* 2003. *J. Invest. Dermatol.* 120:501.
  4. Winding B, *et al.* 2002. *Clin. Cancer Res.* 8:1932. (IHC)
  5. Voswinckel R, *et al.* 2003. *Circ. Res.* 93:372. (IHC)
  6. Kairaitis LK, *et al.* 2005. *Am. J. Physiol. Renal. Physiol.* 288:F198. (IHC, WB)
  7. Ao A, *et al.* 2008. *P. Natl. Acad. Sci. USA* 105:7821. [PubMed](#)
  8. Zaynagetdinov R., *et al.* 2011. *J Immunol.* 187:5703. [PubMed](#).

**Description:** CD34 is a highly glycosylated hematopoietic progenitor antigen. Two isoforms of

CD34 have been reported to be generated by alternative splicing. This antigen is expressed on hematopoietic progenitors as well as on endothelial cells, brain, and testis. CD34 is thought to function as an adhesion molecule for early hematopoietic progenitors mediating the attachment of stem cells to extracellular matrix or stromal cells. CD34 is phosphorylated on serine residues by PKC.

**Antigen  
References:**

1. Garlanda C, *et al.* 1997. *Eur. J. Cell Biol.* 73:368.
2. Brown J, *et al.* 1991. *Int. Immunol.* 3:175.
3. Suda J, *et al.* 1992. *Blood* 79:2288.
4. Baumhueter S, *et al.* 1994.