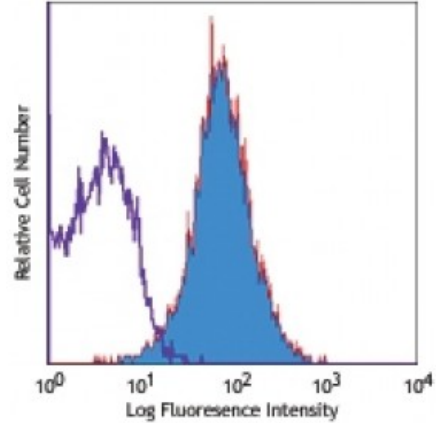


Alexa Fluor® 647 anti-mouse CD34

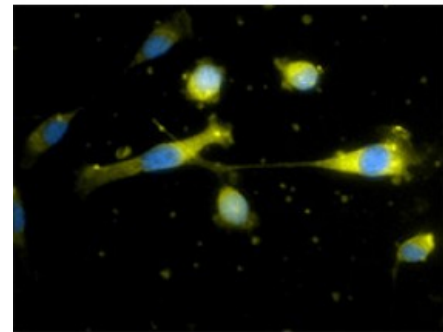
Catalog # / Size: 1196570 / 100 µg
Clone: MEC14.7
Isotype: Rat IgG2a, κ
Immunogen: Cells transfected with mouse CD34
Reactivity: Mouse
Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration: 0.5



Mouse NIH/3T3 cell line stained with MEC14.7 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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Mouse NIH/3T3 cells were fixed with 1% paraformaldehyde (PFA), and then stained with 1 microg/ml of CD34 (clone MEC14.7) Alexa Fluor® 647 (yellow) for 4 hours at room temperature. Nuclei were counterstained with DAPI and are shown in blue. The image

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.
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 blotting⁶, and immunohistochemistry of acetone-fixed frozen sections and paraffin-embedded sections^{2,4,5,6}.

- 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](#)

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.