

Biotin anti-mouse CD34

Catalog # / Size: 1196520 / 500 µg
1196515 / 50 µg

Clone: MEC14.7

Isotype: Rat IgG2a, κ

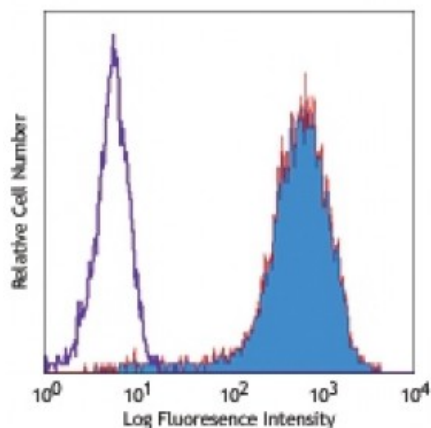
Immunogen: Cells transfected with mouse CD34

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

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

Concentration: 0.5



Mouse NIH/3T3 cell line stained with biotinylated MEC14.7, followed by Sav-PE

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.

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.