

PE/Dazzle™ 594 anti-mouse CD34

Catalog # / Size: 1196645 / 25 µg

Clone: MEC14.7

Isotype: Rat IgG2a, κ

Immunogen: Cells transfected with mouse CD34

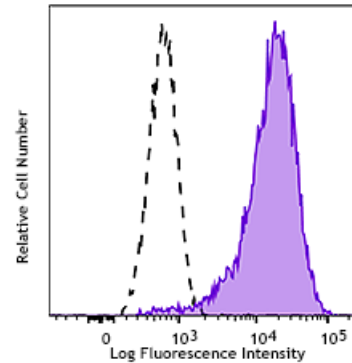
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

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

Workshop Number: HCDM listed

Concentration: 0.2 mg/mL



Mouse fibroblast cell line NIH/3T3 was stained with CD34 (clone MEC14.7) PE/Dazzle™ 594 (filled histogram) or rat IgG2a, κ PE/Dazzle™ 594 isotype control (open histogram).

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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 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](#)
 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. *Blood* 84:2554.