

## PE/Cy7 anti-human CD34

**Catalog # / Size:** 343515 / 25 tests  
343516 / 100 tests

**Clone:** 581

**Isotype:** Mouse IgG1,  $\kappa$

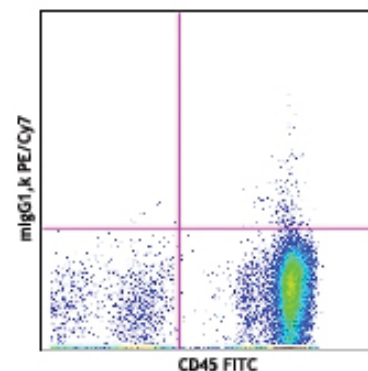
**Workshop Number:** V MA27

**Reactivity:** Human, **Cross-Reactivity:** Cynomolgus

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood stained with 581 PE/Cy7 or mouse IgG1,k isotype control PE/Cy7. Cytograms were gated to display total live CD14 negative mononuclear cells.

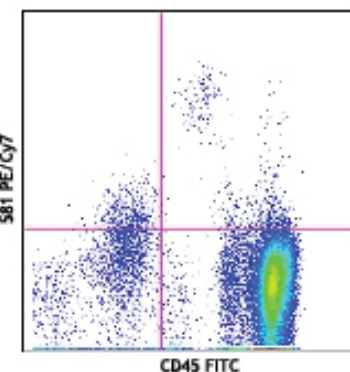
## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** The 581 antibody recognizes the class III group epitope which is resistant to sialidase/glycolyprotease and chymopapain treatment. Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin-embedded tissue sections<sup>5</sup> and immunofluorescence<sup>6</sup>.

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.



- Application References:**
- Schlossman SF, *et al.* 1995. *Leukocyte Typing V: White Cell Differentiation Antigen*. New York: Oxford University Press.
  - Felschow DM, *et al.* 2001. *Blood* 97:3768.
  - Rudin CE, *et al.* 1997. *Br. J. Haematol.* 97:488.
  - Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
  - Skowasch D, *et al.* 2003. *Cardiovasc Res.* 60:684. (IHC)
  - Umland O, *et al.* 2003. *J. Histochem. Cytochem.* 51:977. (IF)

**Description:** CD34, also known as gp105-120, is a type I monomeric sialomucin-like glycoposphoprotein with an approximate molecular weight of 105-120 kD. Selectively expressed on the majority of hematopoietic stem/progenitor cells, bone marrow stromal cells, capillary endothelial cells, embryonic fibroblasts, and some nervous tissue, CD34 is a commonly used marker to identify human hematopoietic stem/progenitor cells. According to the differential sensitivity to enzymatic cleavage, four groups of epitopes of CD34 have been described. CD34 mediates cell adhesion and lymphocytes homing through binding to L-selectin and E-selectin ligands.

- Antigen References:**
- Krause DS, *et al.* 1996. *Blood* 87:1.
  - Puri KD, *et al.* 1995. *J. Cell Biol.* 131:261.
  - Zola H, *et al.* 2007. *Leukocyte and Stromal Cell Molecules: The CD Markers*. John Wiley & Sons Inc, Hoboken New Jersey.

Related Products:	Product	Clone	Application
	PE/Cy7 Mouse IgG1, $\kappa$ Isotype Ctrl	MOPC-21	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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