

Product Data Sheet

PerCP anti-human CD34

Catalog # / Size: 343519 / 25 tests
343520 / 100 tests

Clone: 581

Isotype: Mouse IgG1, κ

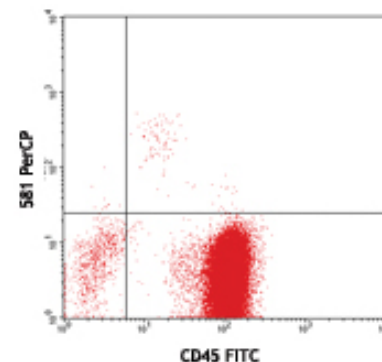
Workshop Number: V MA27

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

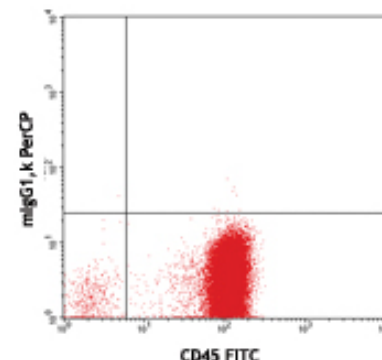
Preparation: The antibody was purified by affinity chromatography, and conjugated with PerCP under optimal conditions. The solution is free of unconjugated PerCP and unconjugated antibody.

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 leukocytes stained with CD45 FITC and 581 PerCP (top) or mouse IgG1, κ PerCP isotype control (bottom). Cytogram gated for total live CD14 negative lymphocyte population



Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5 μ l per million cells or 5 μ l per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP has a maximum absorption of 482 nm and 564 nm and a maximum emission of 675 nm.

Application Notes: The 581 antibody recognizes the class III group epitope which is resistant to sialidase/glycolipase and chymopapain treatment. Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin-embedded tissue sections⁵ and immunofluorescence⁶.

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 glycoprophosphoprotein 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
PerCP Mouse IgG1, κ 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



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biollegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.