



PC-664-T100

## Monoclonal Antibody to CD34 PerCP (100 tests)

Clone: 581

**Isotype:** Mouse IgG1

Specificity: The mouse monoclonal antibody 581 reacts with CD34 (Mucosialin), a 110-115

kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most pluripotential stem cells; it is gradually lost on progenitor cells. The antibody recognizes the class III CD34 epitope resistant to

neuraminidase, chymopapain and glycoprotease.

HLDA V.; WS Code MA27

Regulatory Status: RUO

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Peridinin-chlorophyll-protein complex

(PerCP) under optimum conditions. The conjugate is purified by size-exclusion

chromatography and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

10 μl reagent / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD34 is a highly glycosylated monomeric 111-115 kDa surface protein, which is

present on many stem cell populations. It is a well established stem cell marker, though its expression on human hematopoietic stem cells is reversible. CD34 probably serves as a surface receptor that undergoes receptor-mediated endocytosis and regulates adhesion, differentiation and proliferation of hematopoietic stem cells and other progenitors. CD34 expression is likely to represent a specific state of hematopoietic development that may have altered adhering properties with expanding and differentiating capabilities in both in vitro

and in vivo conditions.



## PRODUCT DATA SHEET

## References:

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\*Goardon N, Nikolousis E, Sternberg A, Chu WK, Craddock C, Richardson P, Benson R, Drayson M, Standen G, Vyas P, Freeman S: Reduced CD38 expression on CD34+ cells as a diagnostic test in myelodysplastic syndromes. Haematologica. 2009 Aug;94(8):1160-3.

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