

1F-566-T100

## Monoclonal Antibody to CD34 Fluorescein (FITC) conjugated (100 tests)

Clone: QBEnd-10

Isotype: Mouse IgG1

Specificity: The antibody QBEnd-10 reacts with Class II epitope on 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. This antibody has been also used as an

endothelial marker.

HLDA V.; WS Code BP BP275 HLDA V.; WS Code E E038 HLDA V.; WS Code M MA065 HLDA V.; WS Code M MR09

Regulatory Status: RUO

Immunogen: Human endothelial vesicles

Species Reactivity: Human, Non-Human Primates

**Negative Species:** Rat, Bovine, Sheep, Canine (Dog)

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC 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

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

The content of a vial (2 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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\*Kuzu I, Bicknell R, Harris AL, Jones M, Gatter KC, Mason DY: Heterogeneity of vascular endothelial cells with relevance to diagnosis of vascular tumours. J Clin Pathol. 1992 Feb;45(2):143-8.

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\*Poblet E, Jimenez-Acosta F, Rocamora A: QBEND/10 (anti-CD34 antibody) in external root sheath cells and follicular tumors. J Cutan Pathol. 1994 Jun;21(3):224-8.

\*Traoré Y, Hirn J: Certain anti-CD34 monoclonal antibodies induce homotypic adhesion of leukemic cell lines in a CD18-dependent and a CD18-independent way. Eur J Immunol. 1994 Oct;24(10):2304-11.

And many other publications.

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