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PE Mouse anti-CD34 Monoclonal Antibody

CLX375PE

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 progenitor 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

Immunogen: Human endothelial vesicles

Species Reactivity: Human, Non-Human Primates

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

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) 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 phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

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. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

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.

References:

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