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## Azide Free Mouse anti-CD34 Monoclonal Antibody

**CLX375NA**

**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

**Immunogen:** Human endothelial vesicles

**Species Reactivity:** Human, Non-Human Primates

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

**Purity:** > 95% (by SDS-PAGE)

**Concentration:** 1.0 mg/ml

**Preparation:** Purified from hybridoma culture supernatant by protein-A affinity chromatography.

**Storage Buffer:** Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized.

**Storage / Stability:** Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.

**Applications:** Flow Cytometry, Recommended dilution: 5 µg/ml

Immunoprecipitation

Western Blotting

Immunohistochemistry (paraffin sections) Recommended dilution: 1-2 µg/ml

Immunohistochemistry (frozen sections)

Functional Application

The antibody QBEnd-10 induces homotypic adhesion of leukemic cell line.

**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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- \*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.

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