



1A-566-T100

Monoclonal Antibody to CD34 Allophycocyanin (APC) conjugated (100 tests)

Clone:	QBEnd-10
Isotype:	Mouse IgG1
Specificity:	<p>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.</p> <p>HLDA V.; WS Code BP BP275 HLDA V.; WS Code E E038 HLDA V.; WS Code M MA065 HLDA V.; WS Code M MR09</p>
Immunogen:	Human endothelial vesicles
Species Reactivity:	Human, Non-Human Primates
Negative Species:	Rat, Bovine, Sheep, Canine (Dog)
Preparation:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) 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:	<p>Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.</p> <p>Do not use after expiration date stamped on vial label.</p> <p>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.</p>
Expiration:	See vial label
Lot Number:	See vial label
Background:	<p>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.</p>

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

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- *Ramani P, Bradley NJ, Fletcher CD: QBEND/10, a new monoclonal antibody to endothelium: assessment of its diagnostic utility in paraffin sections. *Histopathology.* 1990 Sep;17(3):237-42.
- *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.
- *Sutherland DR, Marsh JC, Davidson J, Baker MA, Keating A, Mellors A: Differential sensitivity of CD34 epitopes to cleavage by *Pasteurella haemolytica* glycoprotease: implications for purification of CD34-positive progenitor cells. *Exp Hematol.* 1992 Jun;20(5):590-9.
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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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