

Monoclonal Antibody to CD34 Class II - Purified

Alternate names:	Hematopoietic progenitor cell antigen CD34, Hematopoietic progenitor cell marker
Catalog No.:	SM1095PT
Quantity:	25 µg
Concentration:	1.0 mg/ml
Background:	CD34 is a single chain transmembrane glycoprotein of 105 - 120kD. Expressed on haemopoietic cells, including bone marrow and blood. It is expressed on the majority of cells in acute lymphoid leukaemia (ALL) as well as cells in acute myelogenous leukaemia (AML). It is also found on capillary endothelial cells. There are three classes of CD34 epitopes defined by differential sensitivity to enzymatic cleavage with glycoprotease from <i>Pasteurella haemolytica</i> and with neuraminidase.
Uniprot ID:	P28906
NCBI:	NP_001020280.1
GeneID:	947
Host / Isotype:	Mouse / IgG1
Clone:	QBEND/10
Immunogen:	Human endothelial cell membrane vesicles. Spleen cells from immunised NZB mice were fused with cells of the mouse NSO myeloma cell line.
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein A Buffer System: PBS containing 0.09% Sodium Azide as preservative
Applications:	Western Blot. Immunoprecipitation. Flow Cytometry: Use 10 µl of 1/100-1/200 diluted antibody to label 10e6 cells in 100 µl. Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin Sections: 1/500-1/1000. This product does not require antigen retrieval using heat treatment or protein digestion. However staining of paraffin embedded formalin fixed tissues may be enhanced by enzyme pre-treatment using pronase or heat treatment using citrate buffer. <i>Recommended Positive Control:</i> Tonsil, Bone Marrow. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Specificity:

This antibody recognises the Class II epitope on CD34.

Ultrastructure studies, using an indirect immunogold technique on ultra thin sections of human umbilical artery, have revealed that this antigen is associated to a degree with the basoluminal surfaces of endothelium, a slight reaction with an intracytoplasmic vesicular compartment is shown.

Predominant staining is on the endothelial cell membrane. Some cross reactions with vascular associated adventitia and some basement membranes.

Clone QBEND-10 immunoprecipitates a glycoprotein of Mr 110 kD expressed on haemopoietic cells and on the established myeloid leukemic cell line KG1a.

Species: Human, Rhesus Monkey. Does **not** react with Sheep, Bovine, Dog and Rat. Other species not tested.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

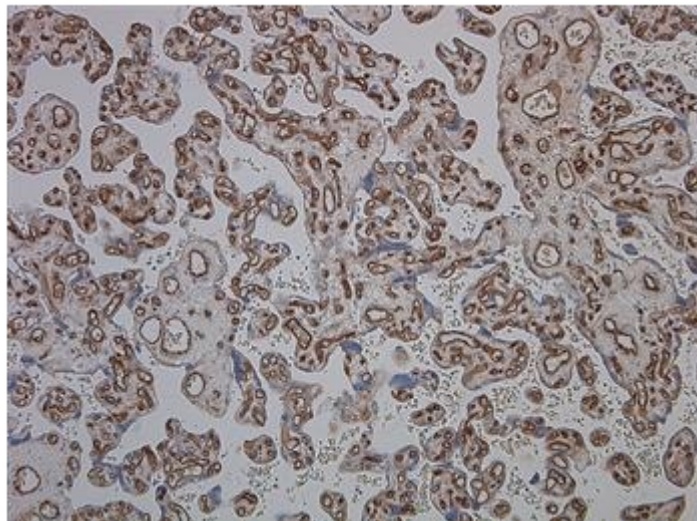
Shelf life: one year from despatch.

General References: 1. Fina, L. et al. (1990) Expression of the CD34 gene in vascular endothelial cells. *Blood* 75: 2417-2426.

2. Sopper, S. et al. (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of Rhesus monkeys. *Cytometry* 29: 351-362.

3. Yoshino, N. et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp. Anim.* 49 (2): 97-110.

4. Pammer, J. et al. (1996) CD40 antigen is expressed by endothelial cells and tumor cells in Kaposi's sarcoma. *Am. J. Pathol.* 148; 1387-1396.

Pictures:

Paraffin processed placenta stained with Mouse anti Human CD34 Class II antibody SM1095PX.

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