

**MONOCLONAL ANTIBODY CD34**

Cat. No.	Form	Quantity	Presentation
1185	Pre-diluted	6 ml	Ready-to-use

**Clone** QBEND10

**Isotype** IgG1 (mouse)

**Immunogen** Human endothelial cells (HUVE)

**Specificity** The CD34 cell surface antigen (110 kD) is expressed by early normal hematopoietic progenitor cells and by many acute leukemia cells. Anti-CD34 antibody reacts also with blood vessel endothelial cells in tissue sections (recently, CD34 mRNA has been detected in vascular endothelial cells) (1,2). The reactivity of QBEND10 has been recently reviewed (7).

Normal tissues: hematopoietic progenitor cells in bone marrow and vascular endothelial cells (1,2,3,5).

Tumor tissues: Studies (3,4,6) have shown that:

1. AML and B-ALL are positive for CD34;
2. CD34 antigen is rarely expressed in T-ALL and in CML blastic crises;
3. CD34 is not present in CLL, CML and lymphomas;
4. CD34 antigen is strongly expressed in vascular neoplasms (angiosarcoma, Kaposi's sarcoma, epithelioid hemangioendothelioma, hemangiopericytoma, hemangioma);
5. Focal weak staining may be seen in a minority of leiomyosarcomas and squamous cell carcinomas, moderate to intense staining in around 50% of the epithelioid sarcomas.

**Positive Control** Blood vessels.

**Applications** Immunohisto and cytochemical staining of CD34 in vascular tumors (angiosarcoma, Kaposi's sarcoma, epithelioid hemangio-endothelioma, hemangiopericytoma, hemangioma), in hematopoietic progenitor cells and in certain acute leukemias (7)

**Buffer** 50 mM Tris-HCl, 0.15 M NaCl, pH 7.4 containing 1 mg/ml bovine serum albumin and 0.1% sodium azide. The buffer contains a green dye.

December 22, 1994

FOR RESEARCH USE ONLY - NOT FOR USE IN DIAGNOSTIC PROCEDURES



**IMMUNOTECH**  
 130, av. de Lattre de Tassigny - B.P. 177  
 13276 Marseille Cedex 9 (France)  
 Tel. 91 17 27 00 - Fax. 91 41 43 58

**Storage**

The antibody solution should be stored at 2-8°C.

**Recommended Procedure**

QBEND10 antibody is ready for use on cytological samples, frozen sections, and routinely fixed (Bouin's and formalin), paraffin-embedded tissue sections. Process immunostaining according to previously described methods (6).

**References**

- 1) Beschoner, W.E., Civin, C.I., and Strauss, L.L. (1985) « Localization of hematopoietic progenitor cells in tissue with the anti-My-10 monoclonal antibody » Am J Pathol. 119, 1-4.
- 2) Fina, L., Molgaard, H.V., Robertson, D. *et al.* (1990) « Expression of the CD34 gene in vascular endothelial cells. » Blood 75, 2417-2426.
- 3) Traweek, S.T., Kandalaf, P.L., Mehta, P. and Battifora, H. (1991) « The human hematopoietic progenitor cell antigen (CD34) in vascular neoplasia. » Am J Clin Pathol. 1991, 96, 25-31.
- 4) Aziza, J., Mazerolles, C., Selves, J. *et al* (1993) « Comparison of the reactivities of monoclonal antibodies QBEND10 and BNH9 in vascular tumors. » Applied Immunohistochemistry 1 (1) 51-57.
- 5) Barrande, C, Traore, Y., Szekeres, G. and Him, J. (1993) « Isolation and characterization of two new monoclonal antibodies against the CD34 molecule ». Hybridoma, 1993, 12 (2), 203-213.
- 6) Leong, A.S.Y., Applied Immunohistochemistry for the surgical pathologist, 1993, Edward Arnold.
- 7) van de Rijn, M. and Rouse, R.V. (1994) « CD34, A review » Appl. Immunohistochem. 2 (2): 71-80.