

### Instructions For Use

### RA0052-C.5-IFU-RUO

Rev. Date: Feb. 24, 2015

**Revision: 2** 

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

# CD34 (Hematopoietic Stem Cell & Endothelial Marker); Clone QBEnd/10 (Concentrate)

Availability/Contents: <u>Item #</u> <u>Volume</u>
RA0052-C.5 <u>Volume</u>
0.5 ml

**Description:** 

Species: Mouse

Immunogen: Detergent solubilized vesicular suspension prepared from human term placenta

Clone: QBEnd/10
Isotype: IgG1, kappa
Entrez Gene ID: 947 (Human)
Hu Chromosome Loc.: 1q32.2

Synonyms: Hematopoietic Progenitor Cell Antigen, HPCA1, Mucosialin

Mol. Weight of Antigen: 90-110kDa

Format: 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS

with 0.05% BSA & 0.05% azide.

Specificity: This MAb recognizes a single chain, transmembrane, heavily glycosylated protein of 90-

120kDa, which is identified as CD34. On the basis of differential sensitivity to degradation by specific enzymes, epitopes of monoclonal antibodies to CD34 are classified into three main categories, class I, class II and class III. It is a class II antibody whose epitope is resistant to neuraminidase but sensitive to glycoprotease and chymopapain. Anti-CD34 labels > 85% of

angiosarcoma and Kaposi's sarcoma, but with a lower specificity.

Background: CD34 expression is a hallmark for identifying pluripotent hematopoietic stem or progenitor cells.

Its expression is gradually lost as lineage committed progenitors differentiate. CD34 is a marker of choice for staining blasts in acute myeloid leukemia. In addition, CD34 is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. Its expression is also found in vascular endothelium. Additionally, it appears that proliferating endothelial cells

express this molecule more than the non-proliferating endothelial cells.

Species Reactivity: Human, Cynomolgus Monkey, Rhesus Monkey. Does not react with rat, sheep, cow and dog.

Others not known.

Positive Control: KG-1 cells, Tonsil, or Angiosarcoma

Cellular Localization: Cell surface

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml

Flow Cytometry: 0.5-1 µg/million cells

 $\begin{tabular}{ll} Immunofluorescence: & 0.5-1 $\mu g/m l$ \\ Western Blotting: & 0.25-0.5 $\mu g/m l$ \\ \end{tabular}$ 

Immunoprecipitation: 0.5-1 μg/500μg protein lysate

Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A.

CE

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**Uses/Limitations:** Not to be taken internally.

For Research Use Only.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

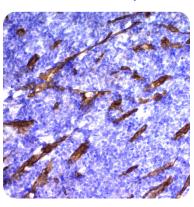
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human tonsil (20X) stained with CD34; Clone QBEnd/10.

#### Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature.
   However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).

Do not pipette by mouth.

Avoid contact of reagents and specimens with skin and mucous membranes.

Avoid microbial contamination of reagents or increased nonspecific staining may occur.

This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200,

OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

### References:

1. Ramani P; Bradley NJ; Fletcher CD. QBEND/10, a new monoclonal antibody to endothelium: assessment of its diagnostic utility in paraffin sections. Histopathology, 1990, 17:237-42.

### Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C

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