

## 30-1028-AC: Anti-CD34 / Mucosialin Monoclonal Antibody (Clone:QBEnd-10) APC Conjugated

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	QBEnd-10
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	APC
<b>Gene :</b>	CD34
<b>Gene ID :</b>	947
<b>Uniprot ID :</b>	P28906
<b>Alternative Name :</b>	CD34
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Human endothelial vesicles

### Description

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.

### Product Info

<b>Amount :</b>	100 Tests
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

### Application Note

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

Flow cytometry: Recommended dilution: 5 µg/ml.

Immunohistochemistry (paraffin sections): Recommended dilution: 2-8 µg/ml.

Western blotting: Recommended dilution: 1-2 µg/ml, positive control: TF-1 cells.

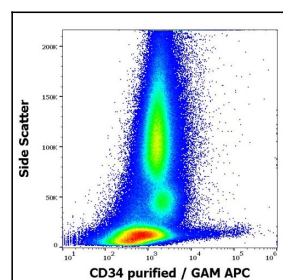


Figure-1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6 1/4g/ml, GAM APC).

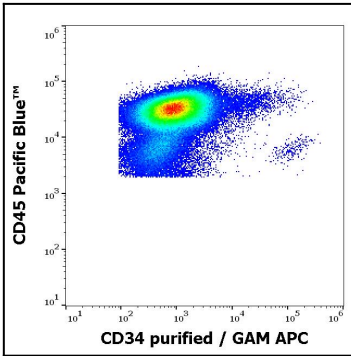


Figure-2: Flow cytometry multicolor surface staining of human peripheral blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6  $\mu$ g/ml, GAM APC, red-filled) and anti-human CD45 (MEM-28) Pacific Blue™ antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

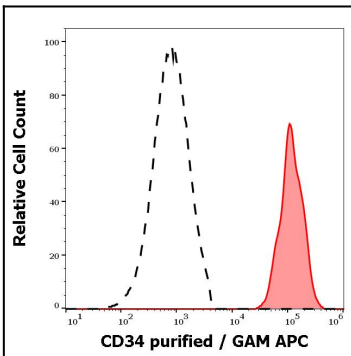


Figure-3: Separation of human CD45dim CD34 positive stem cells (red-filled) from human lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of peripheral whole blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6  $\mu$ g/ml, GAM APC).

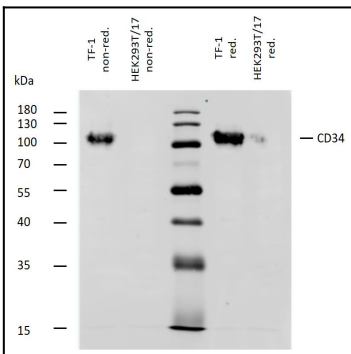


Figure-4: Western blotting analysis of human CD34 using mouse monoclonal antibody QBEnd-10 on lysates of TF-1 cell line and HEK293T/17 cell line (CD34 non-expressing cell line; negative control) under non-reducing and reducing conditions. Nitrocellulose membrane was probed with 2  $\mu$ g/ml of mouse anti-CD34 monoclonal antibody QBEnd-10 followed by IRDye800-conjugated anti-mouse IgG1 secondary antibody. A specific band was detected for CD34 protein at approximately 110 kDa.

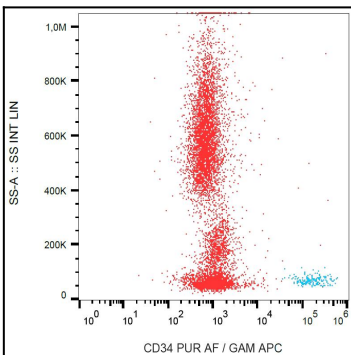


Figure-5: Flow cytometry analysis (surface staining) of CD34 in human peripheral blood with anti-CD34 (QBEnd-10) azide free.