

30-1028: Anti-CD34 / Mucosialin Monoclonal Antibody (Clone:QBEnd-10)-Azide free

Clonality :	Monoclonal
Clone Name :	QBEnd-10
Application :	FACS
Reactivity :	Human
Gene :	CD34
Gene ID :	947
Uniprot ID :	P28906
Alternative Name :	CD34
Isotype :	Mouse IgG1
Immunogen Information :	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

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography
Storage condition :	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.

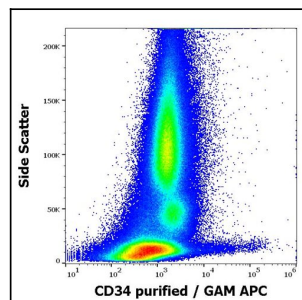


Figure-1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6 µg/ml, GAM APC).

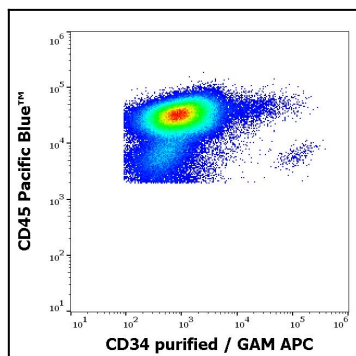


Figure-2: Flow cytometry multicolor surface staining of human peripheral blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6 µg/ml, GAM APC, red-filled) and anti-human CD45 (MEM-28) Pacific Blue™ antibody (10 µl reagent / 100 µl of peripheral whole blood).

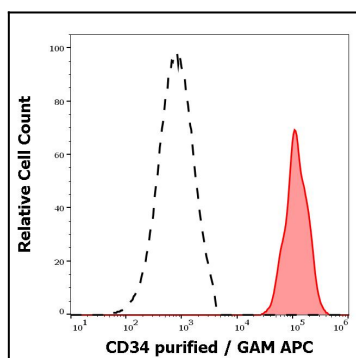


Figure-3: Separation of human CD45dim CD34 positive stem cells (red-filled) from human lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of peripheral whole blood stained using anti-human CD34 (QBEnd-10) purified antibody (concentration in sample 0,6 µg/ml, GAM APC).

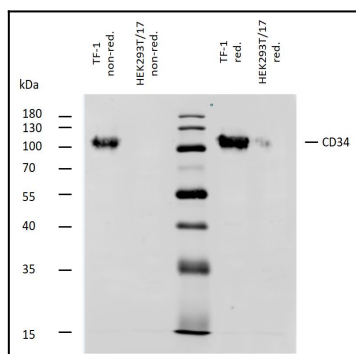


Figure-4: Western blotting analysis of human CD34 using mouse monoclonal antibody QBEnd-10 on lysates of TF-1 cell line and HEK293T/17 cell line (CD34 non-expressing cell line; negative control) under non-reducing and reducing conditions. Nitrocellulose membrane was probed with 2 µg/ml of mouse anti-CD34 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.

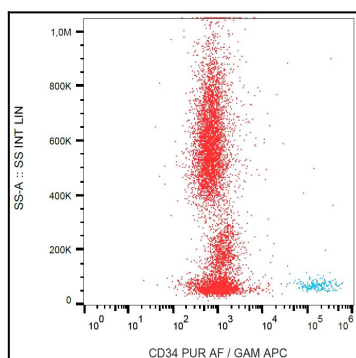


Figure-5: Flow cytometry analysis (surface staining) of CD34 in human peripheral blood with anti-CD34 (QBEnd-10) azide free.