

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD34 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # QBEnd10
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human endothelial vesicles
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

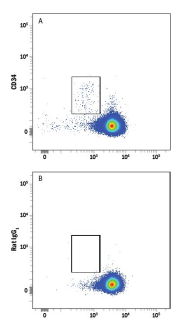
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	5 µL/10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	10 µg/mL	See Below

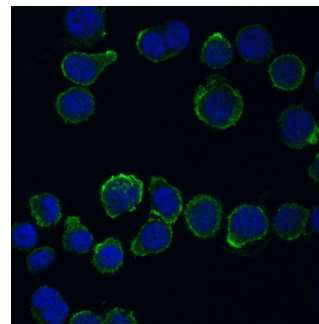
## DATA

### Flow Cytometry



**Detection of CD34 in Human PBMCs by Flow Cytometry.** Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD45 Alexa Fluor® 700-conjugated Monoclonal Antibody (Catalog # FAB1430N) and either (A) Mouse Anti-Human CD34 Alexa Fluor® 488-conjugated Monoclonal Antibody (Catalog # FAB7227G) or (B) Mouse IgG<sub>1</sub> Alexa Fluor 488 Isotype Control (Catalog # IC002G). View our protocol for [Staining Membrane-associated Proteins](#).

### Immunocytochemistry



**CD34 in KG-1 Human Cell Line.** CD34 was detected in immersion fixed KG-1 human acute myelogenous leukemia cell line using Mouse Anti-Human CD34 AlexaFluor® 488-conjugated Monoclonal Antibody (Catalog # FAB7227G, green) at 10 µg/mL for 3 hours at room temperature and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

The CD34 family of cell surface transmembrane proteins includes the hematopoietic progenitor cell antigen CD34, Podocalyxin, and Endoglycan. This single-pass sialomucin-like transmembrane protein is heavily glycosylated and phosphorylated by Protein Kinase C (PKC). CD34 is a 115 kDa glycoprotein found on multipotent precursors, bone marrow stromal cells, embryonic fibroblasts, vascular endothelia, as well as some populations of mesenchymal stem cells, and tumor cell lines. CD34 is involved in the adhesion of stem cells to the bone marrow extracellular matrix or to stromal cells.

## PRODUCT SPECIFIC NOTICES

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