Datasheet for ABIN94078

anti-CD34 antibody (Biotin)

3 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	CD34
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD34 antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-Hu CD34 Biotin
Immunogen:	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia.
Clone:	4H11[APG]
Isotype:	IgG1
Specificity:	The mouse monoclonal antibody 4H11[APG] reacts with extracellular class III epitope on CD34, a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most pluripotential stem cells, it is gradually lost on progenitor cells. The antibody 4H11[APG] completely blocks binding of class III antibodies BIRMA K3 and 8G12 on KG1a cell line.
Cross-Reactivity (Details):	Human

Product Details

Purification:	Purified antibody is conjugated with biotin LC-NHS ester under optimum conditions and unconjugated antibody and free biotin are removed by size-exclusion chromatography.

Target Details

Target:	CD34
Alternative Name:	CD34 (CD34 Products)
Background:	CD34 Molecule,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.
Gene ID:	947
UniProt:	P28906

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 1-2 µg/mL.
Restrictions:	For Research Use only

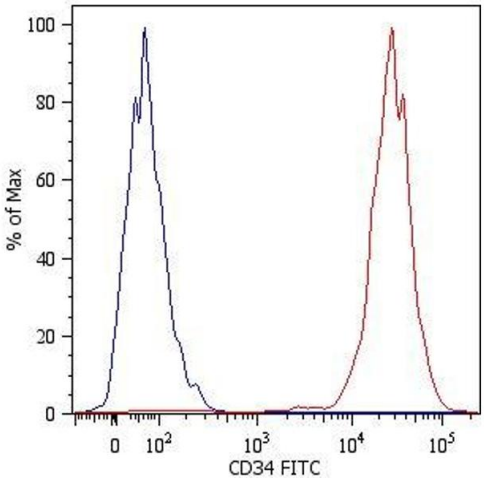
Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

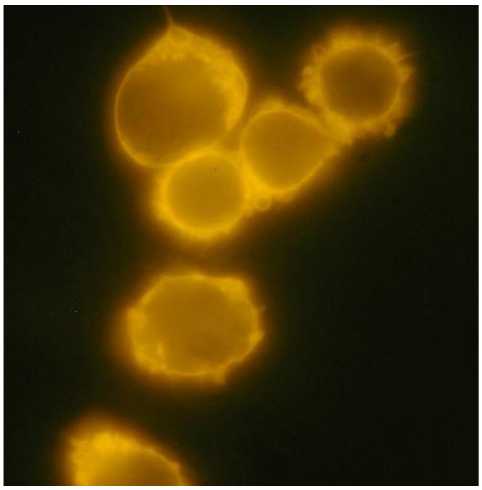
Product cited in:	Elknerová, Lacinová, Soucek, Marinov, Stöckbauer: "Growth inhibitory effect of the antibody to hematopoietic stem cell antigen CD34 in leukemic cell lines." in: **Neoplasma**, Vol. 54, Issue 4, pp. 311-20, (2007) (PubMed).

Images



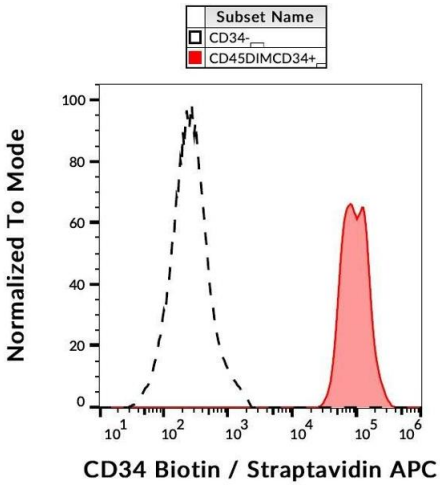
Flow Cytometry

Image 1. Flow Cytometry analysis Surface staining of Kg-1a human acute myelogenous leukemia cell line with anti-human CD34 (4H11[APG]) FITC. Total viable cells were used for analysis.



Immunofluorescence

Image 2. Detection of CD34 in human chronic myeloid leukemia cell line MOLM-7 with anti-human CD34 PE.



Flow Cytometry

Image 3. Surface staining of CD34+ cells in human peripheral blood with anti-CD34 (4H11[APG]) biotin / streptavidin-APC.