

Datasheet for ABIN94077

**anti-CD34 antibody**

4 Images

1 Publication

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## Overview

Quantity:	0.1 mg
Target:	CD34
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD34 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

## Product Details

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
Purification:	Purified by protein-A affinity chromatography.

## Product Details

Purity: > 95 % (by SDS-PAGE)

## 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: Western blotting: Recommended dilution: 1-2 µg/mL, positive control: Kg-1a, TF-1 cells, non-reducing conditions.  
Flow cytometry: Recommended dilution: 2 µg/mL.  
Immunohistochemistry (paraffin sections): Recommended dilution: 10 µg/mL, positive tissue: placenta endothelium.

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.**

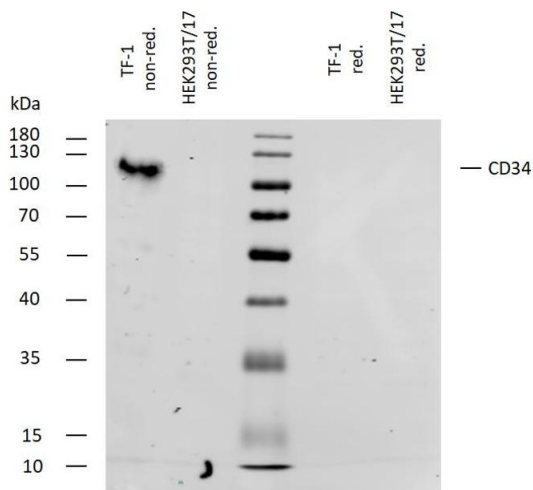
Handling

Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

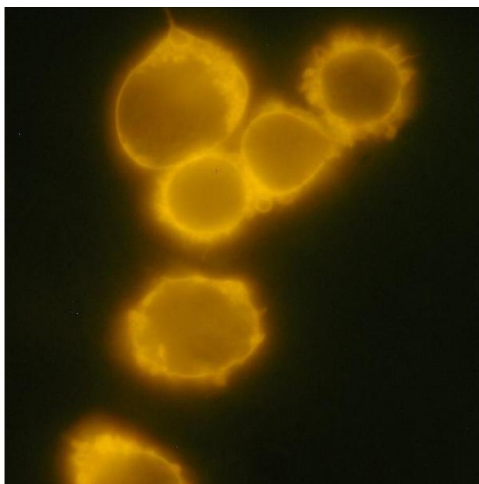
Product cited in:	Elknerová, Lacinová, Soucek, Marinov, Stöckbauer: "Growth inhibitory effect of the antibody to hematopoietic stem cell antigen CD34 in leukemic cell lines." in: <b>Neoplasma</b> , Vol. 54, Issue 4, pp. 311-20, (2007) ( <a href="#">PubMed</a> ).
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Images



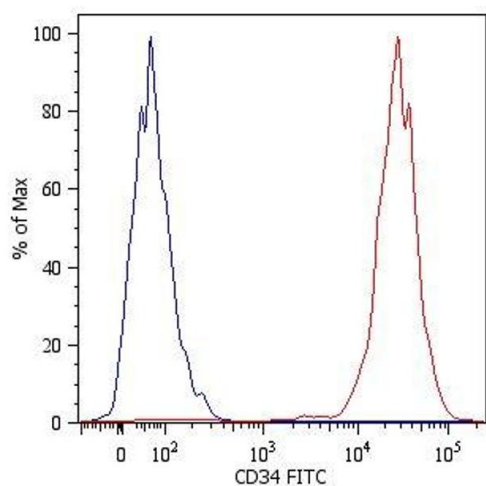
Western Blotting

**Image 1.** Western blotting analysis of human CD34 using mouse monoclonal antibody 4H11[APG] 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 4H11[APG] followed by IRDye800-conjugated anti-mouse IgG1 secondary antibody. A specific band was detected for CD34 protein at approximately 110 kDa.



Immunofluorescence

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



### Flow Cytometry

**Image 3.** 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.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN94077.