

Datasheet for ABIN1027678
anti-CD34 antibody (FITC)[Go to Product page](#)

4 Images

9 Publications

Overview

Quantity:	100 tests
Target:	CD34
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD34 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Clone:	581
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 581 reacts with an extracellular epitope of 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 recognizes the class III CD34 epitope resistant to neuraminidase, chymopapain and glycoprotease.
No Cross-Reactivity:	Sheep
Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome 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: The reagent is designed for analysis of human blood cells using 4 µL reagent / 100 µL of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing 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

Handling

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Sanz, Muñoz-A, Monserrat, Van-Den-Rym, Escoll, Ranz, Alvarez-Mon, de-la-Hera: "Ordering human CD34+CD10-CD19+ pre/pro-B-cell and CD19- common lymphoid progenitor stages in two pro-B-cell development pathways." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 107, Issue 13, pp. 5925-30, (2010) ([PubMed](#)).

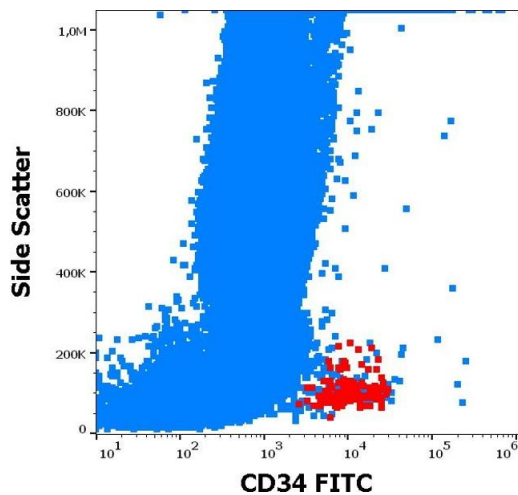
Goardon, Nikolousis, Sternberg, Chu, Craddock, Richardson, Benson, Drayson, Standen, Vyas, Freeman: "Reduced CD38 expression on CD34+ cells as a diagnostic test in myelodysplastic syndromes." in: **Haematologica**, Vol. 94, Issue 8, pp. 1160-3, (2009) ([PubMed](#)).

Ninos, Jefferies, Cogle, Kerr: "The thrombopoietin receptor, c-Mpl, is a selective surface marker for human hematopoietic stem cells." in: **Journal of translational medicine**, Vol. 4, pp. 9, (2006) ([PubMed](#)).

Ono, Sharma, Smith, Burnett, Aurelian: "CD34+ cells in the peripheral blood transport herpes simplex virus DNA fragments to the skin of patients with erythema multiforme (HAEM)." in: **The Journal of investigative dermatology**, Vol. 124, Issue 6, pp. 1215-24, (2005) ([PubMed](#)).

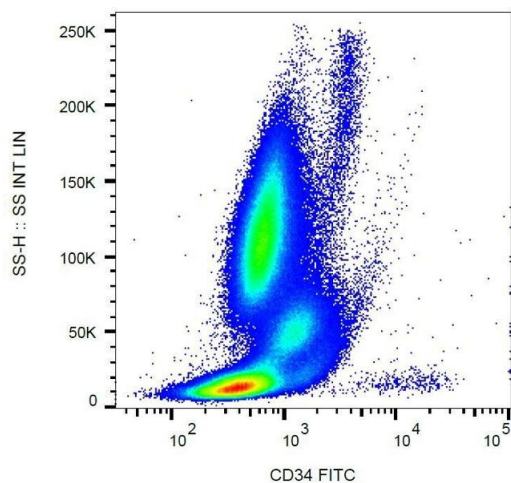
Kato, Ando, Nakamura, Muguruma, Sato, Yabe, Yabe, Hattori, Yasuda, Hotta: "Absence of a CD34- hematopoietic precursor population in recipients of CD34+ stem cell transplantation." in: **Bone marrow transplantation**, Vol. 28, Issue 6, pp. 587-95, (2001) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



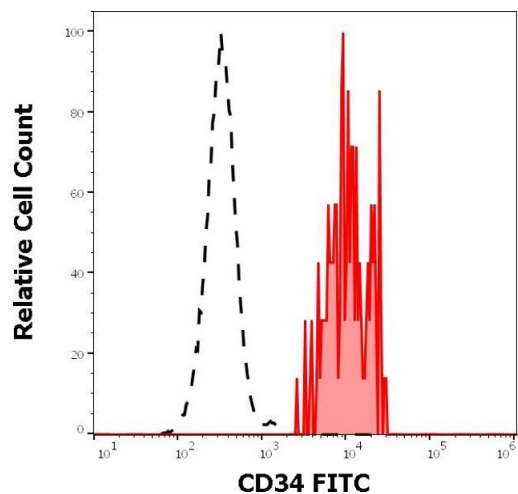
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood showing CD34 positive stem cells (red) stained using anti-human CD34 (581) FITC antibody (4 μ L reagent / 100 μ L of peripheral whole blood).



Flow Cytometry

Image 2. Surface staining of CD34+ cells in human peripheral blood with anti-CD34 (581) FITC.



Flow Cytometry

Image 3. Separation of human CD34 positive stem cells (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD34 (581) FITC antibody (4 μ L reagent / 100 μ L of peripheral whole blood).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN1027678.