

## Anti – Human CD34 (581)

Fluorochrome	Reference	Size
FITC	34F-100T	100 test
FITC	1399990996	100 test
PE	34PE-100T	100 test
PerCP	34PP-100T	100 test
APC	34A-100T	100 test
PerCP-Cyanine 5.5	34PP5.5-100T	100 test
APC-C750	34AC750-100T	100 test

### PRODUCT DESCRIPTION

**Clone:** 581

**Isotype:** IgG1

**Tested application:** flow cytometry

**Immunogen:** The anti-CD34 monoclonal antibody derives from human CD34 cells.

**Species reactivity:** Human, **Cross-Reactivity:** Cynomolgus.

**Storage instruction:** store in the dark at 2-8 °C

**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>).

**Recommended usage:** Immunostep's CD34, clone 581, is a monoclonal antibody intended for:

- Immunophenotyping: identification and enumeration of hematopoietic progenitor cell antigen CD34 also known as gp105-120, expressed on the majority of hematopoietic stem/progenitor cells. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells.

- Exosomes detection: Reference 1399990996 is effective for detection of exosomes in combination with ExoStep Kit and capture beads.

**Presentation:** liquid

**Source:** Supernatant proceeding from an *in vitro* cell culture of a cell hybridoma.

**Purification:** Affinity chromatography.

### ANTIGEN DETAILS

**Large description:** The CD34 antigen is a single-chain transmembrane glycoprotein. The antigen is associated with human hematopoietic progenitor cells and is a differentiation stage-specific leucocyte antigen.

The CD34 antigen is present on immature hematopoietic precursor cells and all hematopoietic colony-forming cells in bone marrow and blood, including unipotent and pluripotent progenitors. The CD34 antigen is present on early myeloid cells that express the CD33 antigen but lack the CD14 and CD15 antigens and on early erythroid cells that express the CD71 antigen and dimly express the CD45 antigen. The CD34 antigen is also found on capillary endothelial cells and approximately 1% of human thymocytes. Normal peripheral blood lymphocytes, monocytes, granulocytes, and platelets do not express the CD34 antigen.<sup>(1-4)</sup>

**Other Names:** Hematopoietic progenitor cell antigen CD34, Gp105-120, My10.

**Gene ID:** 947

**Molecular weight:** 105 - 120 kDa

Please, refer to [www.immunostep.com](http://www.immunostep.com) technical support for more information.

### WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties. Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

### REFERENCES

1. Knapp W. Leucocyte typing IV : white cell differentiation antigens. Oxford: Oxford University Press; 1989.
2. Molgaard HV, Spurr NK, Greaves MF. The hemopoietic stem cell antigen, CD34, is encoded by a gene located on chromosome 1. *Leukemia* 1989 Nov;3(11):773-6.
3. Hoffres HG, Lowe JA, Pedersen RO, Schmidte G, McDonald DF. BIRMA-K3, a new monoclonal antibody for CD34 immunophenotyping and stem and progenitor cell assay. *J Hematother* 1996 Jun;5(3):261-70.
4. Orfao A, Chillon MC, Bortoluci AM, Lopez-Berges MC, Garcia-Sanz R, Gonzalez M, et al. The flow cytometric pattern of CD34, CD15 and CD13 expression in acute myeloblastic leukemia is highly characteristic of the presence of PML-RARalpha gene rearrangements. *Haematologica* 1999 May;84(5):405-12.

### MANUFACTURED BY



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