

## Product datasheet for **SM1603F**

### Cd34 Rat Monoclonal Antibody [Clone ID: MEC14.7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MEC14.7
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> Use 10 µl of neat CD34 antibody to label 10e6 cells in 100 µl. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	This antibody recognises the murine CD34 cell surface antigen, which is expressed by endothelial cells and by haematopoietic stem cells. It recognises a neuraminidase sensitive epitope. As in the human system, CD34 antibodies in the mouse demonstrate slightly different staining patterns depending on their fine specificity. Clone MEC14.7 appears to recognise a subset of the stem cell population recognised by clone RAM34, and it is thought that this is due to differences in the epitope recognised by the two antibodies.
Formulation:	PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC State: Liquid purified IgG fraction. Label: Fluorescein Isothiocyanate Isomer 1
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G.
Conjugation:	FITC
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD34 antigen



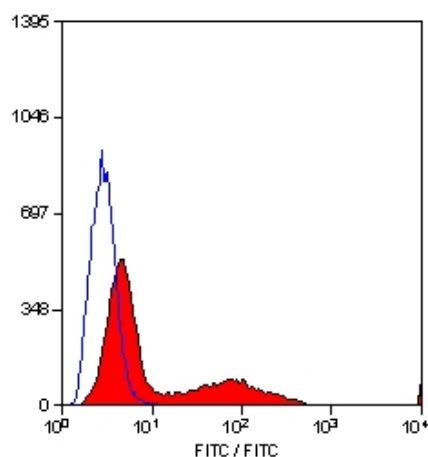
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**Database Link:** [Entrez Gene 12490 Mouse Q64314](#)

**Background:** The highly glycosylated 75-120 kD antigen CD34 is possibly an adhesion molecule with a putative role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. It could act as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins expressed by stromal cells or other marrow components. CD34 is thought to have a role in presenting carbohydrate ligands to selectins. The intracellular chain of the CD34 antigen is a site of phosphorylation by activated protein kinase C, suggesting a putative role in signal transduction. Two isoforms of CD34 have been reported to be generated by alternative splicing. CD34 is highly expressed on hematopoietic progenitors, as well as on endothelial cells, brain, and testis. Staining for CD34 has been used to measure angiogenesis, which reportedly predicts tumor recurrence.

**Synonyms:** Hematopoietic progenitor cell marker

### Product images:



Staining of mouse bone marrow cells with Rat Anti Mouse CD34-FITC (SM1603F)