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Product datasheet for SM3018BT

CD34 Class III Mouse Monoclonal Antibody [Clone ID: 4H11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4H11
Applications:	FC
Recommended Dilution:	**Indirect immunofluorescence analysis by Flow cytometry**(1:200 as starting point).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia
Specificity:	This antibody reacts with Class III epitope on CD34 (Mucosialin), 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 II antibody QBEnd10 and Class III antibodies BIRMA K3 and 8G12 on KG1a cell line.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 Label: Biotin State: Liquid purified Ig fraction Label: The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Concentration:	lot specific
Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2 - 8 °C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	CD34 molecule
Database Link:	Entrez Gene 947 Human P28906

View online »

Background: 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.

Synonyms: Hematopoietic progenitor cell marker

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Hematopoietic cell lineage

Product images:

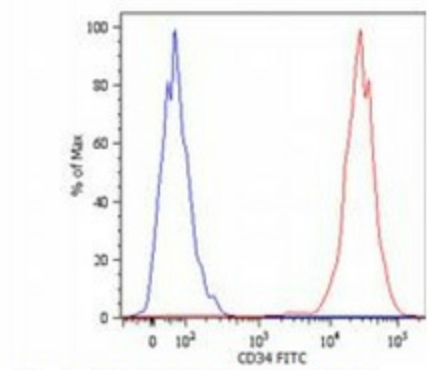

Fig. 1. Flow Cytometry analysis

Fig. 1. 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.