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Product datasheet for SM3018P

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

Product data:

Product Type:	Primary Antibodies
Clone Name:	4H11
Applications:	FC, IF, IHC, WB
Recommended Dilution:	**Flow Cytometry:** 2 µg/ml. **Western blot** (non-reducing conditions): 2 µg/ml. *Positive control:* Kg-1a human leukemia cell lysate. *Negative control:* JURKAT human leukemia T-cell line. *Sample preparation:* Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. **Immunohistochemistry on Paraffin Sections:** 10 µg/ml. Positive tissue: placenta endothelium. **Immunocytochemistry.**
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:	The antibody reacts with 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 completely blocks binding of Class II antibody QBEnd10 and Class III antibodies BIRMA K3 and 8G12 on KG1a cell line.
Formulation:	PBS pH 7.4 with 15 mM Sodium Azide as preservative State: Purified State: Liquid purified Ig fraction (> 95% by SDS-PAGE)
Concentration:	lot specific
Purification:	Purified by protein-A affinity chromatography.

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.
DO NOT FREEZE!

Stability: Shelf life: one year from despatch.

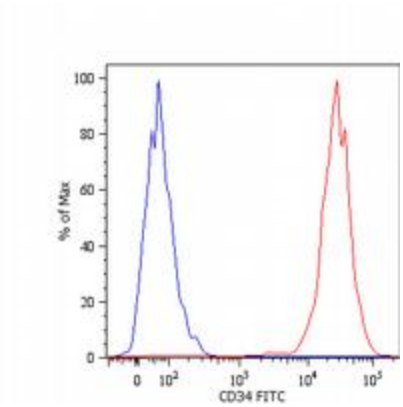
Gene Name: CD34 molecule

Database Link: Entrez Gene 947 Human
P28906

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

Product images:



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.