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30-1185AF700: Alexa Fluor 700 conjugated Anti-CD34 / Mucosialin Monoclonal Antibody (Clone:4H11[APG])

Clonality :	Monoclonal
Clone Name :	4H11[APG]
Application :	FACS
Reactivity :	Human
Gene :	CD34
Gene ID :	947
Uniprot ID :	P28906
Alternative Name :	CD34;HLDA VI: WS Code M MA58
Isotype :	Mouse IgG1
Immunogen Information :	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia.

Description

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.

Specificity: The mouse monoclonal antibody 4H11[APG] reacts with extracellular 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 4H11[APG] completely blocks binding of class III antibodies BIRMA K3 and 8G12 on KG1a cell line.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with Alexa Fluor 700 NHS ester under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 106 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

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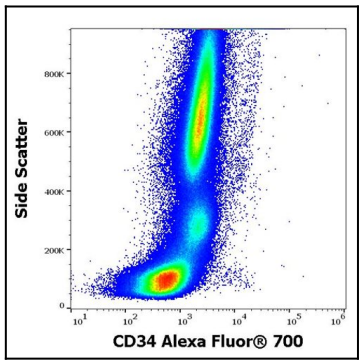

Figure-1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD34 (4H11[APG]) Alexa Fluor 700 antibody (4 µl reagent / 100 µl of peripheral whole blood).

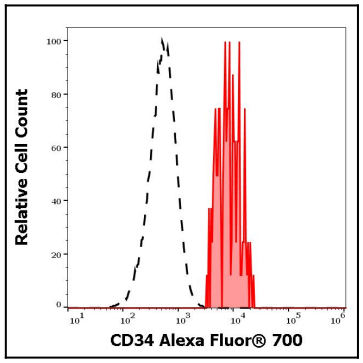

Figure-2: Separation of human CD34 positive stem cells (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD34 (4H11[APG]) Alexa Fluor 700 antibody (4 µl reagent / 100 µl of peripheral whole blood).

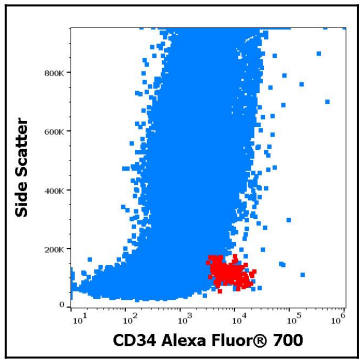

Figure-3: Flow cytometry surface staining pattern of human peripheral whole blood showing CD34 positive stem cells (red) stained using anti-human CD34 (4H11[APG]) Alexa Fluor 700 antibody (4 µl reagent / 100 µl of peripheral whole blood).