TECHNICAL DATA SHEET

CyFlow™ CD34 Alexa Fluor™ 488
Anti-Hu; Clone 4H11[APG]

REF **CX896258**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD34
Alternative Names	—
Clone	4H11[APG]
Clonality	monoclonal
Format	Alexa Fluor™ 488
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia

Specificity

The mouse monoclonal antibody 4H11[APG] recognizes Class III epitope on CD34 antigen, a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and

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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.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD34 (Mucosialin) 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.

References

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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