

## 30-2582: Anti-Human CD34 PE-DyLight® 594 (Clone : 4H11[APG])

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	4H11[APG]
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD34
<b>Gene ID :</b>	947
<b>Alternative Name :</b>	Mucosialin,CD34 molecule
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	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 (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.

### Product Info

<b>Amount :</b>	100 tests
<b>Purification :</b>	The purified antibody is conjugated with tandem dye PE-DyLight <sup>Å</sup> 594 under optimum conditions. The conjugate is purified by size-exclusion chromatography.
<b>Content :</b>	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
<b>Storage condition :</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

### Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 Åµl reagent / 100 Åµl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

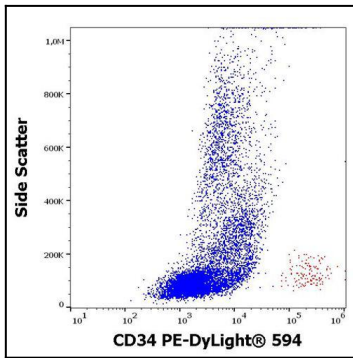


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood showing CD34 positive stem cells (red) stained using anti-human CD34 (4H11[APG]) PE-DyLight® 594 antibody (4 µl reagent / 100 µl of peripheral whole blood).