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

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| **Clonality :** | Monoclonal |
| **Clone Name :** | 4H11[APG] |
| **Application :** | FACS |
| **Reactivity :** | Human |
| **Conjugate :** | PE-DyLight® 594 |
| **Gene :** | CD34 |
| **Gene ID :** | 947 |
| **Alternative Name :** | Mucosialin,CD34 molecule |
| **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 (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

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| **Amount :** | 100 tests |
| **Purification :** | The purified antibody is conjugated with tandem dye PE-DyLight® 594 under optimum conditions. The conjugate is purified by size-exclusion chromatography. |
| **Content :** | Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide |
| **Storage condition :** | 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 ÂµI reagent / 100 ÂµI of whole blood or $10^6$ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

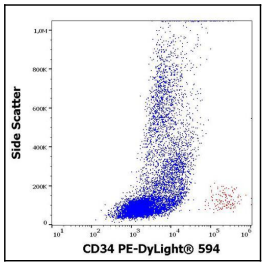


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood showing CD34 positive stem cells (red) stained using anti-human CD34 (4H11[APG]) PE-DyLight® 594 antibody (4 µl reagent / 100 µl of peripheral whole blood).