

30-1470PC-Cy5.5: PerCP-Cy5.5 conjugated Anti-CD34 Monoclonal Antibody (Clone: 581)

Clonality : Monoclonal
Clone Name : 581
Application : FACS
Reactivity : Human, Non-Human Primates
Gene : CD34
Gene ID : 947
Uniprot ID : P28906
Isotype : Mouse IgG1 kappa

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 581 reacts with an extracellular epitope of 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 recognizes the class III CD34 epitope resistant to neuraminidase, chymopapain and glycoprotease.

Product Info

Amount : 100 tests
Purification : Purified antibody is conjugated with activated tandem dye of activated Peridinin-Chlorophyll Protein-Cyanine 5.5 (PerCP-Cy5.5) 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.

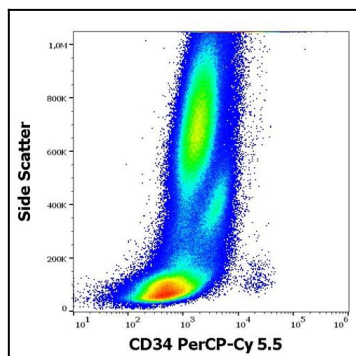


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD34 (581) PerCP-Cy5.5 antibody (4 µl reagent / 100 µl of peripheral whole blood).

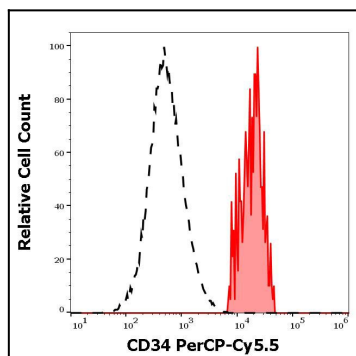


Figure 2: Separation of human CD34 positive stem cells (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD34 (581) PerCP-Cy5.5 antibody (4 µl reagent / 100 µl of peripheral whole blood).