

## Technical Data Sheet

### iF647 Anti-human CD34

**Catalog Number:** 107404, 107405

**Size:** 25 tests, 100 tests

**Target Name:** CD34, Gp105-120, My10

**Regulatory Status:** RUO

#### Product Details

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**Clone:** 581

**Application:** FC

**Reactivity:** Human

**Format:** iF647

**Isotype:** Mouse IgG1

**Antibody Type:** Monoclonal

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

**Protein Concentration:** Supplied at a lot-specific concentration.

**Storage&Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

**Recommended Usage:** For flow cytometric staining, it is recommended to use 5 µL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

**Excitation Laser:** Red Laser (633 nm)

**Release Date:** Dec-25

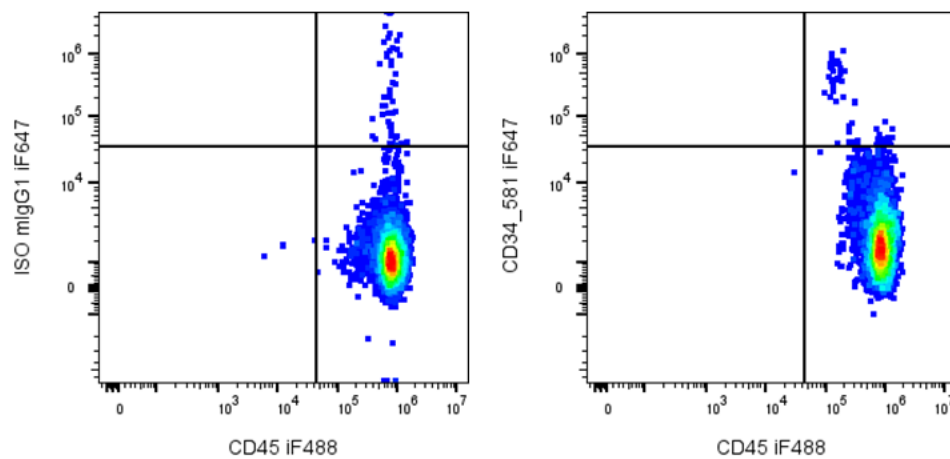
#### Background Information

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CD34 (gp105–120) is a type I monomeric sialomucin-like glycoposphoprotein with a molecular weight of 105–120 kDa, expressed on hematopoietic stem and progenitor cells, bone marrow stromal cells, capillary endothelial cells, embryonic fibroblasts, and some neural tissues. CD34 serves as a widely used stem cell marker and mediates cell adhesion and lymphocyte homing through interactions with L-selectin and E-selectin ligands. CD34 expression is dynamic and reversible, reflecting specific states of hematopoietic development, including proliferation, differentiation, and altered adhesion properties. Multiple epitopes have been identified based on differential enzymatic sensitivity. Clinically, CD34 is expressed in ~40% of acute myeloid leukemias and 65% of pre-B acute lymphoblastic leukemias, but only 1–5% of acute T-lymphoid leukemias. It is also used to assess stem cell counts for transplantation and can provide prognostic information in certain cancers.

#### Product Data

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Human peripheral blood leukocytes stained with iF488 Anti-human CD45 and either iF647 Anti-Human CD34 clone 581 (right panel) or an isotype control (left panel).