

iF488 Anti-Human CD34 Antibody

Catalog Number:	107406, 107407
Size:	25 tests, 100 tests
Target Name:	CD34, Gp105-120, My10
Regulatory Status:	RUO

PRODUCT DETAILS

Clone:	581
Application:	Flow Cytometry
Reactivity:	Human
Format:	iF488
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 uL 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:	Blue Laser (488 nm)

BACKGROUND INFORMATION

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.