

PE/Dazzle™ 594 anti-human CD34 Antibody

Catalog# / Size	378607 / 25 tests 378608 / 100 tests
Clone	S20016E
Regulatory Status	RUO
Other Names	Hematopoietic progenitor cell antigen CD34
Isotype	Mouse IgG2a, κ
Description	CD34, also known as gp105-120, is a type I monomeric sialomucin-like glycoposphoprotein with an approximate molecular weight of 105-120 kD. Since it is selectively expressed on the majority of hematopoietic stem/progenitor cells, bone marrow stromal cells, capillary endothelial cells, embryonic fibroblasts, and some nervous tissue, CD34 is a commonly used marker to identify human hematopoietic stem/progenitor cells. According to the differential sensitivity to enzymatic cleavage, four groups of epitopes of CD34 have been described. CD34 mediates cell adhesion and lymphocytes homing through binding to L-selectin and E-selectin ligands. About 40% of acute myeloid leukemias and 65% of pre-B acute lymphoblastic leukemias express CD34, whereas only 1-5% of acute T-lymphoid leukemias are CD34 positive.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human CD34-transfected cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	The S20016E antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease treatment.
RRID	AB_3699023 (BioLegend Cat. No. 378607) AB_3699023 (BioLegend Cat. No. 378608)

Antigen Details

Structure	Single-pass type I membrane protein
Distribution	Hematopoietic stem/progenitor cells, bone marrow stromal cells, endothelial cells, embryonic fibroblasts
Function	Cell adhesion
Interaction	L-selectin, CRKL
Ligand/Receptor	L-selectin, E-selectin
Cell Type	Endothelial cells, Fibroblasts, Hematopoietic stem and progenitors
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Simmons DL, <i>et al.</i> 1992. <i>Journal of Immunology</i>. 148: 267-71. 2. Krause DS, <i>et al.</i> 1996. <i>Blood</i>. 84: 1-13. 3. Sidney LE, <i>et al.</i> 2014. <i>Stem Cells</i>. 32:1380-9.

Gene ID [947](#)

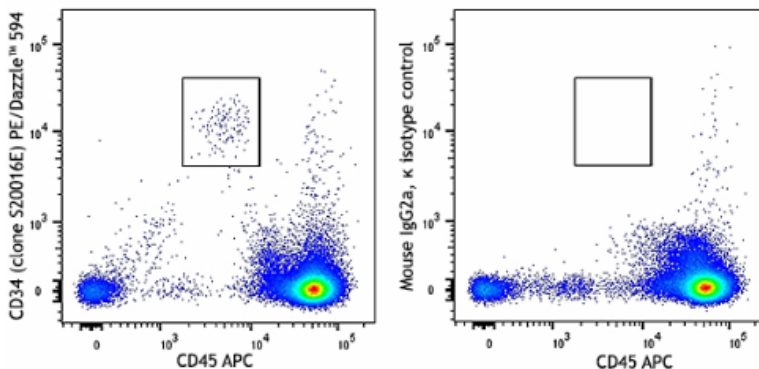
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD34, PE anti-human CD34, APC anti-human CD34, PE/Dazzle™ 594 anti-human CD34 Antibody

Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD45 (clone HI30) APC and anti-human CD34 (clone S20016E) PE/Dazzle™ 594 (left) or mouse IgG2a, κ PE/Dazzle™ 594 isotype control (right). Data shown was gated on the CD14-negative cells.

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