

Purified anti-human CD34 Antibody

Catalog# / Size	378602 / 100 µg
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 glycoprophosphoprotein 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
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	The S20016E antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease treatment.
RRID	AB_2910441 (BioLegend Cat. No. 378602)

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

Antigen References

1. Simmons DL, *et al.* 1992. *Journal of Immunology*. 148: 267-71.
2. Krause DS, *et al.* 1996. *Blood*. 84: 1-13.
3. Sidney LE, *et al.* 2014. *Stem Cells*. 32:1380-9.

Gene ID

[947](#)

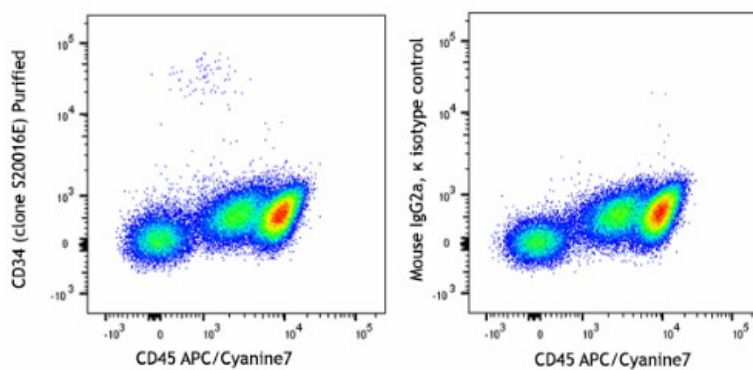
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD34

Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD45 APC/Cyanine7 and purified anti-human CD34 (clone S20016E) (left) or mouse IgG2a, κ isotype control followed by anti-mouse IgG-PE (right). Data shown was gated on CD14 - cell population.

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