

Alexa Fluor® 647 anti-human CD34 Antibody

Catalog# / Size	343617 / 25 tests 343618 / 100 tests
Clone	561
Regulatory Status	RUO
Other Names	Gp105-120, My10, Mucosialin
Isotype	Mouse IgG2a, κ

Description CD34, also known as gp105-120, is a type I monomeric sialomucin-like glyco-phosphoprotein with an approximate molecular weight of 105-120 kD. 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 for identifying human hematopoietic stem/progenitor cells. Based on different sensitivities, 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.

Product Details

Verified Reactivity	Human
Reported Reactivity	Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
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 Alexa Fluor® 647 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	The 561 antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease and chymopapain treatment.
Application References	1. Croockewit AJ, <i>et al.</i> 1998. <i>Scand. J. Immunol.</i> 47:82. 2. Rosenzweig M, <i>et al.</i> 2001. <i>J. Med. Primatol.</i> 30:36.
(PubMed link indicates BioLegend citation)	
Product Citations	1. Singh A, <i>et al.</i> 2020. <i>Mol Oncol.</i> 1.901388889. PubMed 2. Zhang Y, <i>et al.</i> 2019. <i>Nat Commun.</i> 10:3667. PubMed 3. Boulch M, <i>et al.</i> 2021. <i>Sci Immunol.</i> 6:. PubMed

RRID

AB_2632631 (BioLegend Cat. No. 343617)
AB_2632632 (BioLegend Cat. No. 343618)

Antigen Details

Structure	105-120 kD single chain mucin-like glycoprotein
Distribution	Hematopoietic stem/progenitor cells, bone marrow stromal cells, endothelial cells, embryonic fibroblasts
Function	Cell adhesion
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
Gene ID	947

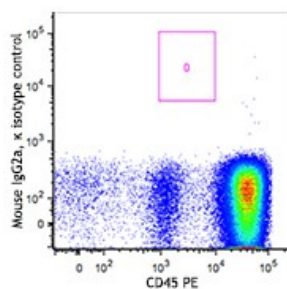
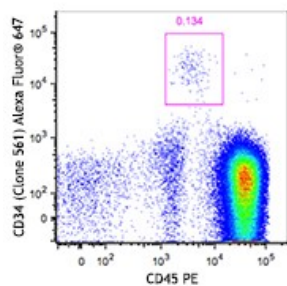
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD34, FITC anti-human CD34, PE anti-human CD34, APC anti-human CD34, Brilliant Violet 421™ anti-human CD34, PerCP/Cyanine5.5 anti-human CD34, APC/Cyanine7 anti-human CD34, PE/Cyanine7 anti-human CD34, Alexa Fluor® 647 anti-human CD34, Brilliant Violet 650™ anti-human CD34, Brilliant Violet 785™ anti-human CD34, Alexa Fluor® 488 anti-human CD34, Alexa Fluor® 700 anti-human CD34

Product Data



Human peripheral blood mononuclear cells were stained with CD45 PE and CD34 (clone 561) Alexa Fluor® 647 (top) or mouse IgG2a, κ isotype control Alexa Fluor® 647 (bottom). Data was gated on CD14⁻ cell population.

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