

Purified anti-human CD34 Antibody

Catalog# / Size	343602 / 100 µg
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.
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 ≤2.0 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 561 antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease and chymopapain treatment.
Application References	<ol style="list-style-type: none">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	<ol style="list-style-type: none">1. Alcántara-Hernández M <i>et al.</i> 2017. <i>Immunity.</i> 47(6):1037-1050. PubMed2. Ortiz AM, <i>et al.</i> 2018. <i>Nat Med.</i> 24:1313. PubMed3. Alcántara-Hernández M, <i>et al.</i> 2021. <i>Nat Protoc.</i> 16:4855. PubMed4. Davidov T, <i>et al.</i> 2021. <i>Int J Mol Sci.</i> 22: PubMed5. Ardain A, <i>et al.</i> 2019. <i>Nature.</i> 570:528. PubMed6. Kennedy-Darling J, <i>et al.</i> 2021. <i>Eur J Immunol.</i> 51:1262. PubMed7. Ghosh S, <i>et al.</i> 2019. <i>Commun Biol.</i> 0.325. PubMed8. Leylek R, <i>et al.</i> 2020. <i>Cell Rep.</i> 32:108180. PubMed
RRID	AB_1732014 (BioLegend Cat. No. 343602)

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

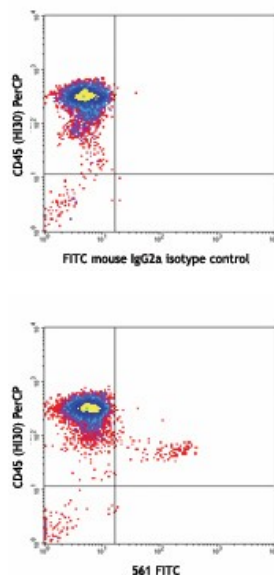
Related Protocols

[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 stained with 561 FITC (lower panel) or FITC mouse IgG2a isotype control (upper panel) and CD45 (HI30) PerCP (gated on CD14- cell population)

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