

FITC anti-human CD34 Antibody

Catalog# / Size	343603 / 25 tests 343604 / 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 FITC 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.
Excitation Laser	Blue Laser (488 nm)
Application Notes	The 561 antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease and chymopapain treatment.
Application References (PubMed link indicates BioLegend citation)	<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.
Product Citations	<ol style="list-style-type: none"> 1. Xin Y, <i>et al.</i> 2021. <i>Stem Cell Res Ther.</i> 49:12. PubMed 2. Abud EM <i>et al.</i> 2017. <i>Neuron.</i> 94(2):278-293 . PubMed 3. Buffone A, <i>et al.</i> 2018. <i>J Cell Sci.</i> 131:.. PubMed 4. Schloss MJ, <i>et al.</i> 2022. <i>Nat Immunol.</i> 23:605. PubMed 5. Tu S, <i>et al.</i> 2020. <i>Cellular Signalling.</i> 73:109695. PubMed 6. Yamauchi T <i>et al.</i> 2018. <i>Cancer cell.</i> 33(3):386-400 . PubMed 7. Wu S, <i>et al.</i> 2020. <i>Stem Cells Int.</i> 2019:1515040. PubMed 8. Xiao X, <i>et al.</i> 2019. <i>Cell Discov.</i> 5:2. PubMed 9. Liu Z, <i>et al.</i> 2021. <i>Molecules.</i> 26:.. PubMed

10. Nathan AA, *et al.* 2017. Trop Med Int Health. 22:1414. [PubMed](#)
11. BÖiers C, *et al.* 2018. Dev Cell. 44:362. [PubMed](#)
12. Gao P, *et al.* 2017. Cytotechnology. 69:751. [PubMed](#)
13. Arvindam US, *et al.* 2021. Leukemia. 35:1586. [PubMed](#)
14. Zhang Y, *et al.* 2012. Int J Lower Extrem Wounds. 11:264. [PubMed](#)
15. Oktaviono YH, *et al.* 2021. F1000Res. 10:15. [PubMed](#)
16. Wang F, *et al.* 2021. Cell. 184(2):422-440.e17. [PubMed](#)
17. Riding AM, *et al.* 2022. iScience. 25:104660. [PubMed](#)
18. de Sousa BM, *et al.* 2021. NPJ Regen Med. 6:80. [PubMed](#)
19. Roy AG, *et al.* 2021. Int J Mol Sci. 22:. [PubMed](#)
20. Zhang Q, *et al.* 2021. Bone Joint Res. 10:226. [PubMed](#)
21. He Z, *et al.* 2020. J Exp Clin Cancer Res. 39:140. [PubMed](#)
22. Lin G, *et al.* 2021. Mol Med Rep. 23:. [PubMed](#)
23. Singh A, *et al.* 2020. Cell Rep. 32:108153. [PubMed](#)
24. Zhou L, *et al.* 2019. Exp Ther Med. 18:105. [PubMed](#)
25. Saygin C, *et al.* 2021. Leukemia. 35:3406. [PubMed](#)
26. Rodriguez A, *et al.* 2021. Cell Stem Cell. 28:33. [PubMed](#)
27. Vanoni G, *et al.* 2021. eLife. 10:00. [PubMed](#)
28. Feng Y, *et al.* 2020. Mol Med Rep. 1.413194444. [PubMed](#)

RRID AB_1732030 (BioLegend Cat. No. 343603)
 AB_1732005 (BioLegend Cat. No. 343604)

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

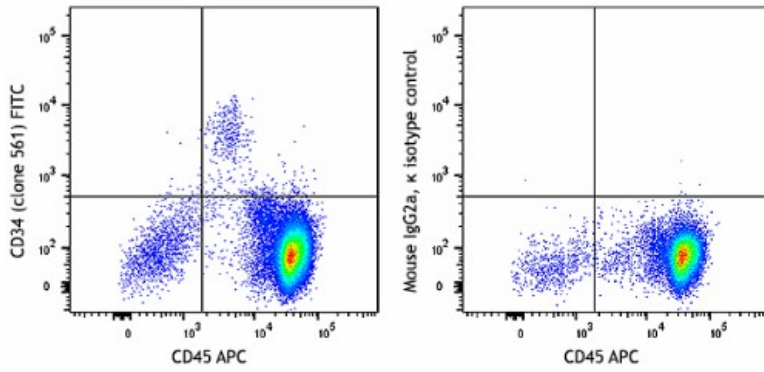
Related Protocols

[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 (clone HI30) APC and CD34 (clone 561) FITC (left) or FITC Mouse IgG2a, κ isotype control (right).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587