

Brilliant Violet 510™ anti-human CD34 Antibody

Catalog# / Size	343627 / 25 tests 343628 / 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 Brilliant Violet 510™ 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	<p>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.</p> <p>Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 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, *et al.* 1998. *Scand. J. Immunol.* 47:82.
2. Rosenzweig M, *et al.* 2001. *J. Med. Primatol.* 30:36.

(PubMed link indicates BioLegend citation)

RRID

AB_3662240 (BioLegend Cat. No. 343627)
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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

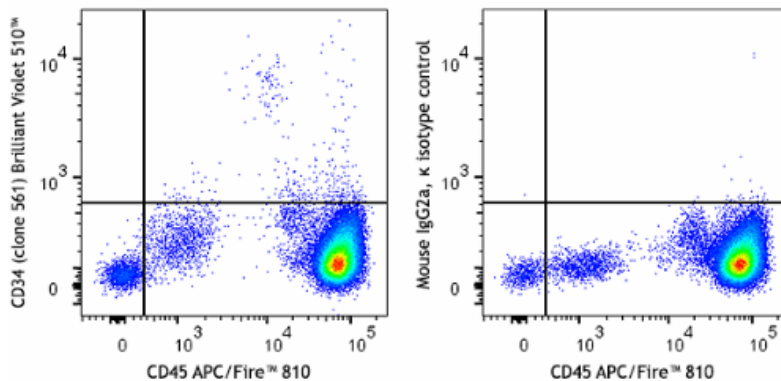
Related Protocols

- [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, Brilliant Violet 510™ anti-human CD34, Brilliant Violet 605™ anti-human CD34, Spark YG™ 581 anti-human CD34 (Flexi-Fluor™), Spark YG™ 593 anti-human CD34 (Flexi-Fluor™) Antibody, Spark NIR™ 685 anti-human CD34 (Flexi-Fluor™) Antibody

Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD14 (clone HCD14) Alexa Fluor® 647, anti-human CD45 (clone HI30) APC/Fire™ 810, and anti-human CD34 (clone 561) Brilliant Violet 510™ (left) or mouse IgG2a, κ Brilliant Violet 510™ isotype control (right). Data shown was gated on the CD14- cell population.

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