

Brilliant Violet 421™ anti-mouse CD34 Antibody

Catalog# / Size	152207 / 25 µg 152208 / 100 µg
Clone	SA376A4
Regulatory Status	RUO
Other Names	My10, gp105-120, mucosialin
Isotype	Rat IgG2a, λ
Description	CD34, also known as gp105-120, is a highly glycosylated type I monomeric sialomucin-like glycoprophoprotein with an approximate molecular weight of 105-120 kD, with two generated by alternative splicing. CD34 is expressed on hematopoietic progenitors, endothelial cells, brain, and testis. CD34 mediates cell adhesion and lymphocytes homing through binding to L-selectin and E-selectin ligands, and mediates the attachment of stem cells to the extracellular matrix or stromal cells. CD34 is phosphorylated on serine residues by PKC.

Product Details

Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse CD34 transfected cells.
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 421™ under optimal conditions.
Concentration	0.2 mg/ml
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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ 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	This antibody (clone SA376A4) is useful for staining mouse CD34 ⁺ hematopoietic stem cell but it does not stain NIH-3T3 cells and the staining of Bend.3 cells is dimmer compared to other mouse CD34 antibodies, probably due to this antibody recognizes a different epitope than the other monoclonal antibodies.
Product Citations	1. Montecino-Rodriguez E, <i>et al.</i> 2020. STAR Protoc. 1:100159. PubMed

- Liu Z, *et al.* 2020. *Cell*. 178(6):1509-1525.e19. [PubMed](#)
- Pioli PD, *et al.* 2020. *Immunity*. 51(2):351-366. [PubMed](#)

RRID AB_2650765 (BioLegend Cat. No. 152207)
AB_2650766 (BioLegend Cat. No. 152208)

Antigen Details

Structure	Type I monomeric glycoprotein with an approximate molecular weight of 105-120 kD.
Distribution	Hematopoietic progenitors, endothelial cells, brain and testis tissues.
Function	Cell adhesion and homing.
Interaction	PKC.
Ligand/Receptor	L-selectin and E-selectin.
Cell Type	Endothelial cells, Hematopoietic stem and progenitors
Biology Area	Cell Adhesion, Cell Biology, Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">Garlanda C, <i>et al.</i> 1997. <i>Eur J Cell Biol</i>. 73:368-77.Brown J, <i>et al.</i> 1991. <i>Int Immunol</i>. 3:175.Suda J, <i>et al.</i> 1992. <i>Blood</i>. 79:2288-95.Baumhueter S, <i>et al.</i> 1994. <i>Blood</i>. 84:2554.
Gene ID	12490

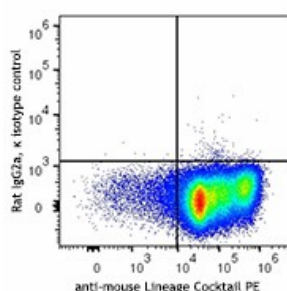
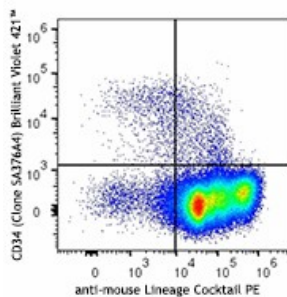
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-mouse CD34, Alexa Fluor® 647 anti-mouse CD34, Brilliant Violet 421™ anti-mouse CD34, PE/Dazzle™ 594 anti-mouse CD34, TotalSeq™-C0823 anti-mouse CD34, TotalSeq™-B0823 anti-mouse CD34 Antibody, APC anti-mouse CD34, PE/Cyanine7 anti-mouse CD34, TotalSeq™-A0823 anti-mouse CD34

Product Data



C57BL/6 mouse bone marrow cells were stained with anti-mouse Lineage Cocktail PE and CD34 (clone SA376A4) Brilliant Violet 421™ (top) or rat IgG2a, κ Brilliant Violet 421™ isotype control (bottom). Data shown was gated on the total cell population.

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