

## Biotin anti-human CD34 Antibody

<b>Catalog# / Size</b>	343523 / 25 µg 343524 / 100 µg
<b>Clone</b>	581
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	V MA27
<b>Other Names</b>	Gp105-120, My10
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD34, also known as gp105-120, is a type I monomeric sialomucin-like glycoprophosphoprotein with an approximate molecular weight of 105-120 kD. 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 to identify human hematopoietic stem/progenitor cells. According to the differential sensitivity to enzymatic cleavage, 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

---

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Cynomolgus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	The 581 antibody recognizes the class III group epitope which is resistant to sialidase/glycolyprotease and chymopapain treatment. Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin-embedded tissue sections <sup>5</sup> and immunofluorescence <sup>6</sup> .
<b>Application References</b> (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> <li>Schlossman SF, <i>et al.</i> 1995. <i>Leukocyte Typing V: White Cell Differentiation Antigen</i>. New York: Oxford University Press.</li> <li>Felschow DM, <i>et al.</i> 2001. <i>Blood</i> 97:3768.</li> <li>Rudin CE, <i>et al.</i> 1997. <i>Br. J. Haematol.</i> 97:488.</li> <li>Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> <li>Skowasch D, <i>et al.</i> 2003. <i>Cardiovasc Res.</i> 60:684. (IHC)</li> <li>Umland O, <i>et al.</i> 2003. <i>J. Histochem. Cytochem.</i> 51:977. (IF)</li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>Omer OS, <i>et al.</i> 2020. <i>Methods Mol Biol.</i> 2121:199. <a href="#">PubMed</a></li> </ol>
<b>RRID</b>	AB_10898324 (BioLegend Cat. No. 343523) AB_10900977 (BioLegend Cat. No. 343524)

## Antigen Details

<b>Structure</b>	105-120 kD single chain mucin-like glycoprotein
<b>Distribution</b>	Hematopoietic stem/progenitor cells, bone marrow stromal cells, endothelial cells, embryonic fibroblasts
<b>Function</b>	Cell adhesion
<b>Ligand/Receptor</b>	L-selectin, E-selectin
<b>Cell Type</b>	Endothelial cells, Fibroblasts, Hematopoietic stem and progenitors
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Krause DS, <i>et al.</i> 1996. <i>Blood</i> 87:1.</li><li>2. Puri KD, <i>et al.</i> 1995. <i>J. Cell Biol.</i> 131:261.</li><li>3. Zola H, <i>et al.</i> 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers</i>. John Wiley &amp; Sons Inc, Hoboken New Jersey.</li></ol>
<b>Gene ID</b>	<a href="#">947</a>

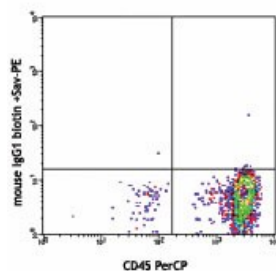
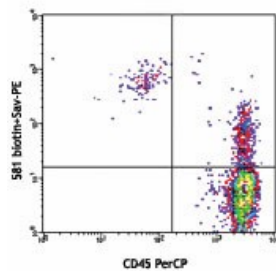
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD34, FITC anti-human CD34, PE anti-human CD34, Alexa Fluor® 647 anti-human CD34, APC anti-human CD34, Pacific Blue™ anti-human CD34, APC/Cyanine7 anti-human CD34, PE/Cyanine7 anti-human CD34, Alexa Fluor® 488 anti-human CD34, PerCP anti-human CD34, PerCP/Cyanine5.5 anti-human CD34, Biotin anti-human CD34, Alexa Fluor® 700 anti-human CD34, Brilliant Violet 510™ anti-human CD34, Purified anti-human CD34 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD34, APC/Fire™ 750 anti-human CD34, TotalSeq™-A0054 anti-human CD34, TotalSeq™-B0054 anti-human CD34, TotalSeq™-C0054 anti-human CD34, TotalSeq™-D0054 anti-human CD34, Spark Red™ 718 anti-human CD34

## Product Data



Human peripheral blood lymphocytes stained with biotinylated CD34 (clone 581) (top), or mouse IgG1 isotype control (bottom), followed by Sav-PE and co-stained with CD14 APC and CD45 PerCP. Gated on CD14 dim population.

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](http://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.

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