

## Alexa Fluor<sup>®</sup> 700 anti-human CD34 Antibody

<b>Catalog# / Size</b>	343621 / 25 tests 343622 / 100 tests
<b>Clone</b>	561
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Gp105-120, My10, Mucosialin
<b>Isotype</b>	Mouse IgG2a, $\kappa$

**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

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor <sup>®</sup> 700 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <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 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.  * Alexa Fluor <sup>®</sup> 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor <sup>®</sup> 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.  Alexa Fluor <sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	The 561 antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease and chymopapain treatment.
<b>Application References</b>	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.
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2632722 (BioLegend Cat. No. 343621) AB_2632723 (BioLegend Cat. No. 343622)

## Antigen Details

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<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>Gene ID</b>	<a href="#">947</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

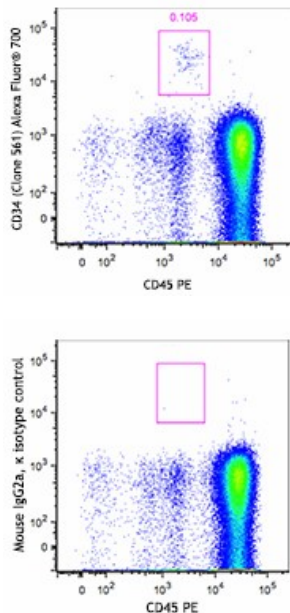
## Other Formats

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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

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Human peripheral blood mononuclear cells were stained with CD45 PE and CD34 (clone 561) Alexa Fluor® 700 (top) or mouse IgG2a, κ Alexa Fluor® 700 isotype control (bottom). Data shown was gated on CD14<sup>+</sup> cell population.

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