

## Pacific Blue™ anti-human CD54 Antibody

<b>Catalog# / Size</b>	353109 / 25 tests 353110 / 100 tests
<b>Clone</b>	HA58
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	HCDM listed
<b>Other Names</b>	ICAM-1, Ly-47
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD54 is a 85-110 kD type I transmembrane protein also known as ICAM-1. It is expressed on activated endothelial cells, high endothelial venules, T and B cells, monocytes/macrophages, granulocytes, and dendritic cells. The expression of ICAM-1 can be released from the cell surface. CD54 plays a role in cellular adhesion and is involved in inflammation and leukocyte extravasation. CD54 has also been shown to be the major cellular receptor for rhinovirus. ICAM-1 binds to CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1), CD11c/CD18 (p150, 95) as well as hyaluronan and fibrinogen.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Colonic cancer BM314 cells
<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 Pacific Blue™ 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.  * Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.  Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Clone HA58 recognizes an epitope located in the extracellular D1 domain of CD54 <sup>3</sup> . Additional reported applications (for the relevant formats) include: spatial biology (IBEX) <sup>4,5</sup> .
<b>Application References</b>	1. Tsujisaki M, <i>et al.</i> 1991. <i>Clin. Exp. Immunol.</i> 85:3. 2. Kanwar JR, <i>et al.</i> 2003. <i>Cancer Gene Ther.</i> 10:468. 3. Kohka H, <i>et al.</i> 1998. <i>J. Leukoc. Biol.</i> 64:519. 4. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	

5. Radtke AJ, et al. 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

## Product Citations

1. Vanoni G, et al. 2022. *Bio Protoc.* 218:. [PubMed](#)
2. Suzuki D, et al. 2020. *Stem Cell Reports.* 14:49. [PubMed](#)
3. Vanoni G, et al. 2021. *eLife.* 10:00. [PubMed](#)

## RRID

AB\_10900822 (BioLegend Cat. No. 353109)  
AB\_10900234 (BioLegend Cat. No. 353110)

## Antigen Details

<b>Structure</b>	Type I membrane protein, Ig superfamily, 85-110 kD
<b>Distribution</b>	Endothelial cells, T cells and B cells, monocytes/macrophages, granulocytes, and dendritic cells
<b>Cell Type</b>	B cells, Dendritic cells, Endothelial cells, Granulocytes, Macrophages, Mesenchymal Stem Cells, Monocytes, T cells
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Voraberger G, et al. 1991. <i>J. Immunol.</i> 147:2777. 2. Staunton DE, et al. 1988. <i>Cell</i> 52:925. 3. Greve JM, et al. 1989. <i>Cell</i> 56:839.
<b>Gene ID</b>	<a href="#">3383</a>

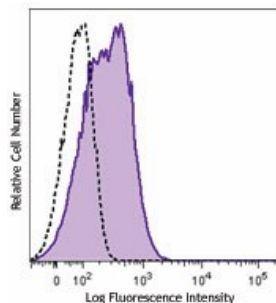
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD54, PE anti-human CD54, FITC anti-human CD54, Pacific Blue™ anti-human CD54, APC anti-human CD54, Alexa Fluor® 647 anti-human CD54, PE/Dazzle™ 594 anti-human CD54, APC/Fire™ 750 anti-human CD54, PE/Cyanine7 anti-human CD54, PerCP/Cyanine5.5 anti-human CD54, TotalSeq™-A0217 anti-human CD54, Alexa Fluor® 700 anti-human CD54, TotalSeq™-C0217 anti-human CD54, Alexa Fluor® 488 anti-human CD54, Brilliant Violet 421™ anti-human CD54, Ultra-LEAF™ Purified anti-human CD54, TotalSeq™-B0217 anti-human CD54, TotalSeq™-D0217 anti-human CD54

## Product Data



Human peripheral blood lymphocytes were stained with CD54 (clone HA58) Pacific Blue™ (filled histogram) or mouse IgG1, κ Pacific Blue™ isotype control (open histogram).

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