

## Brilliant Violet 421™ anti-mouse/human CD11b Antibody

<b>Catalog# / Size</b>	101235 / 125 µL 101251 / 50 µg 101236 / 500 µL
<b>Clone</b>	M1/70
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	αM integrin, Mac-1, Mo1, CR3, Ly-40, C3biR, ITGAM
<b>Isotype</b>	Rat IgG2b, κ
<b>Description</b>	CD11b is a 170 kD glycoprotein also known as αM integrin, Mac-1 α subunit, Mol, CR3, and Ly-40. CD11b is a member of the integrin family, primarily expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b non-covalently associates with CD18 (β2 integrin) to form Mac-1. Mac-1 plays an important role in cell-cell interaction by binding its ligands ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, and fibrinogen.

### Product Details

<b>Verified Reactivity</b>	Mouse, Human, Cynomolgus, Rhesus
<b>Reported Reactivity</b>	Chimpanzee, Baboon, Rabbit
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	C57BL/10 splenocytes
<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 Brilliant Violet 421™ under optimal conditions.
<b>Concentration</b>	µg sizes: 0.2 mg/mL µL sizes: 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 using the µg size, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. For flow cytometric staining using the µL sizes, 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.  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.  <a href="#">Learn more about Brilliant Violet™.</a>  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.
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Clone M1/70 has been verified for immunocytochemistry (ICC) and frozen immunohistochemistry

(IHC-F).

Additional reported applications (for relevant formats of this clone) include: immunoprecipitation<sup>1,4</sup>, *in vitro* blocking<sup>3,9,12</sup>, depletion<sup>2,8</sup>, immunofluorescence microscopy<sup>6,7,10</sup>, immunohistochemistry of acetone-fixed frozen sections<sup>5,11-13</sup>, and spatial biology (IBEX)<sup>35,36</sup>. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/μg, Azide-Free, 0.2 μm filtered) (Cat. No. 101248).

#### Application References

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**RRID** AB\_10897942 (BioLegend Cat. No. 101235)  
AB\_2562904 (BioLegend Cat. No. 101251)  
AB\_11203704 (BioLegend Cat. No. 101236)

## Antigen Details

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<b>Structure</b>	Integrin family, associates with integrin $\beta_2$ (CD18), 170 kD
<b>Distribution</b>	Granulocytes, monocytes/macrophages, dendritic cells, NK cells, subsets of T and B cells
<b>Function</b>	Adhesion, chemotaxis
<b>Ligand/Receptor</b>	ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, fibrinogen
<b>Cell Type</b>	B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils, NK cells, T cells, Tregs
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Barclay A, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Springer TA. 1994. <i>Cell</i> 76:301. 3. Coxon A, <i>et al.</i> 1996. <i>Immunity</i> 5:653.
<b>Gene ID</b>	<a href="#">16409</a> <a href="#">3684</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

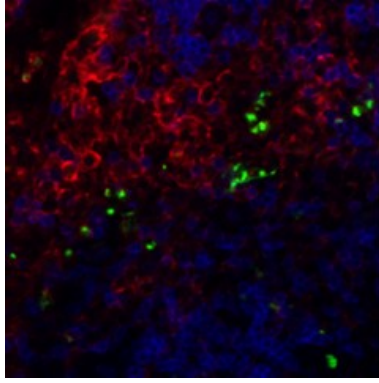
## Other Formats

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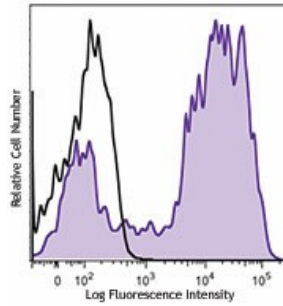
APC anti-mouse/human CD11b, Biotin anti-mouse/human CD11b, FITC anti-mouse/human CD11b, PE anti-mouse/human CD11b, PE/Cyanine5 anti-mouse/human CD11b, Purified anti-mouse/human CD11b, PE/Cyanine7 anti-mouse/human CD11b, Alexa Fluor® 488 anti-mouse/human CD11b, Alexa Fluor® 647 anti-mouse/human CD11b, Alexa Fluor® 700 anti-mouse/human CD11b, Pacific Blue™ anti-mouse/human CD11b, APC/Cyanine7 anti-mouse/human CD11b, PerCP/Cyanine5.5 anti-mouse/human CD11b, PerCP anti-mouse/human CD11b, Brilliant Violet 421™ anti-mouse/human CD11b, Brilliant Violet 570™ anti-mouse/human CD11b, Brilliant Violet 605™ anti-mouse/human CD11b, Brilliant Violet 650™ anti-mouse/human CD11b, Brilliant Violet 711™ anti-mouse/human CD11b, Brilliant Violet 785™ anti-mouse/human CD11b, Brilliant Violet 510™ anti-mouse/human CD11b, Ultra-LEAF™ Purified anti-mouse/human CD11b, Purified anti-mouse/human CD11b (Maxpar® Ready), Alexa Fluor® 594 anti-mouse/human CD11b, PE/Dazzle™ 594 anti-mouse/human CD11b, APC/Fire™ 750 anti-mouse/human CD11b, TotalSeq™-A0014 anti-mouse/human CD11b, Brilliant Violet 750™ anti-mouse/human CD11b, TotalSeq™-B0014 anti-mouse/human CD11b, TotalSeq™-C0014 anti-mouse/human CD11b, Spark NIR™ 685 anti-mouse/human CD11b, PE/Fire™ 640 anti-mouse/human CD11b, Spark YG™ 593 anti-mouse/human CD11b, Spark YG™ 570 anti-mouse/human CD11b, PE/Fire™ 810 anti-mouse/human CD11b, APC/Fire™ 810 anti-mouse/human CD11b Antibody, Spark Blue™ 550 anti-mouse/human CD11b, Spark UV™ 387 anti-mouse/human CD11b

## Product Data

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BL/6 mouse lymph nodes, fixed O/N in PLP, blocked with 10% rat serum, stained with CD11b-BV421™ (red), B220-Alexa Fluor® 647 (blue), CD14-FITC (green) in 1% BSA and 0.1% Tween-20 in PBS. Images were acquired with an automated widefield microscope (Nikon Eclipse Ti) and a CCD camera (QImaging Retiga 2000R). Emitted light was collected through 440/40, 525/50, and 700/75 nm bandpass filters. Images provided by Ann Haberman and Christine Podolski, Yale University.



C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) Brilliant Violet 421™ (filled histogram) or rat IgG2b, κ Brilliant Violet 421™ isotype control (open histogram). Data shown was gated on myeloid cell population.

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