

Brilliant Violet 750™ anti-human CD11b Antibody

Catalog# / Size	301373 / 25 tests 301374 / 100 tests
Clone	ICRF44
Regulatory Status	RUO
Workshop	IV M047
Other Names	Integrin α M chain, C3biR, CR3, Mac-1, Mo1, ITGAM
Isotype	Mouse IgG1, κ
Description	CD11b is a 165-170 kD type I transmembrane glycoprotein also known as α _M integrin, Mac-1, CR3, and C3biR. CD11b non-covalently associates with integrin β ₂ (CD18) and is expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b/CD18 is critical for the transendothelial migration of monocytes and neutrophils. It is also involved in granulocyte adhesion, phagocytosis, and neutrophil activation. CD11b/CD18 interacts with ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4, CD14, CD23, heparin, iC3b, fibrinogen, and factor X.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Chimpanzee, Common Marmoset, Pig
Antibody Type	Monoclonal
Host Species	Mouse
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 750™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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	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 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 750™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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.

Excitation Laser	Violet Laser (405 nm)
Application Notes	<p>The ICRF44 antibody inhibits heterotypic adhesion of granulocytes in response to fMLP. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections, immunofluorescence microscopy⁵, stimulation of monocytes³, blocking of heterotypic PMN aggregation⁸, and blocking of granulocyte activation¹². This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.</p> <p>The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. Nos. 301361 & 301362).</p>

Application References

(PubMed link indicates BioLegend citation)

1. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
3. Rezzonico R, *et al.* 2001. *Blood* 97:2932. (Stim)
4. Marsik C, *et al.* 2003. *Shock* 20:493. (FC)
5. David A, *et al.* 2003. *J. Leukoc. Biol.* 74:551. (IF)
6. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
7. Thurlow LR, *et al.* 2010. *Infect. Immun.* 128:1128. (FC) [PubMed](#)
8. Jadhav S, *et al.* 2001. *J. Immunol.* 167:5986. (Block)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
10. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21. (FC)
11. Wen T, *et al.* 2014. *J Immunol.* 192:5481. (FC) [PubMed](#)
12. Sprong T, *et al.* 2003. *Blood* 102:3702. (Block)

[See More](#)

RRID	AB_3683302 (BioLegend Cat. No. 301373)
	AB_3683302 (BioLegend Cat. No. 301374)

Antigen Details

Structure	Integrin, type I transmembrane glycoprotein, associates with integrin β ₂ (CD18), 165-170 kD
Distribution	Granulocytes, monocytes/macrophages, dendritic cells, NK cells, subset of T cells, subset of B cells
Function	Adhesion, phagocytosis, chemotaxis, neutrophil activation
Ligand/Receptor	ICAM-1(CD54), ICAM-2 (CD102), ICAM-4, CD14, CD23, heparin, iC3b, fibrinogen, factor X
Cell Type	B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils, NK cells, T cells, Tregs
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Stewart M, <i>et al.</i> 1995. <i>Curr Opin Cell Biol.</i> 7:690.
Gene ID	3684

Related Protocols

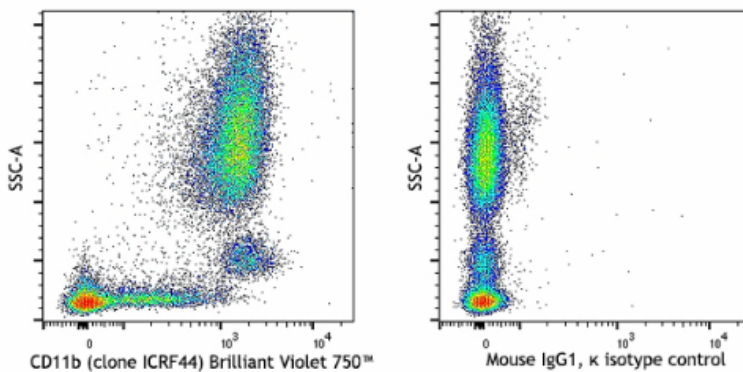
- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human CD11b, Biotin anti-human CD11b, PE anti-human CD11b, PE/Cyanine5 anti-human CD11b, Purified anti-human CD11b, Pacific Blue™ anti-human CD11b, Alexa Fluor® 488 anti-human CD11b, Alexa Fluor® 647 anti-human CD11b, PE/Cyanine7 anti-human CD11b, PerCP/Cyanine5.5 anti-human CD11b, Brilliant Violet 421™ anti-human CD11b, Brilliant Violet 570™ anti-human CD11b, FITC anti-human CD11b, Brilliant Violet 605™ anti-human CD11b, Brilliant Violet 510™ anti-human CD11b, Brilliant Violet 650™ anti-human CD11b, Purified anti-human CD11b (Maxpar® Ready), Alexa Fluor® 594 anti-human CD11b, APC/Cyanine7 anti-human CD11b, Brilliant Violet 711™ anti-human CD11b, Brilliant Violet 785™ anti-human CD11b, PE/Dazzle™ 594 anti-human CD11b, APC/Fire™ 750 anti-human CD11b, TotalSeq™-A0161 anti-human CD11b, Alexa Fluor® 700 anti-human CD11b, TotalSeq™-B0161 anti-human CD11b, TotalSeq™-C0161 anti-human CD11b, Ultra-LEAF™ Purified anti-

human CD11b, TotalSeq™-D0161 anti-human CD11b, GMP PE/Cyanine7 anti-human CD11b, GMP PE anti-human CD11b, Spark UV™ 387 anti-human CD11b, GMP PerCP/Cyanine5.5 anti-human CD11b, GMP APC anti-human CD11b, GMP FITC anti-human CD11b, GMP APC/Fire™ 750 anti-human CD11b, Spark Blue™ 515 anti-human CD11b, Spark Violet™ 500 anti-human CD11b, Spark Red™ 718 anti-human CD11b (Flexi-Fluor™), GMP Pacific Blue™ anti-human CD11b, APC/Fire™ 810 anti-human CD11b, Brilliant Violet 750™ anti-human CD11b Antibody

Product Data



Human peripheral blood leukocytes were stained with anti-human CD11b (clone ICRF44) Brilliant Violet 750™ (left) or mouse IgG1, κ Brilliant Violet 750™ isotype control (right).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

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