



GMP FITC anti-human CD11b Antibody

Catalog# / Size 260308 / 100 tests

Clone ICRF44 Workshop IV M047

Integrin aM chain, C3biR, CR3, Mac-1, Mo1, ITGAM Other Names

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 β2 (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

Reactivity Human, Cynomolgus, Rhesus

Reported Reactivity African Green, Baboon, Chimpanzee, Common Marmoset, Pig

Monoclonal Antibody Type **Host Species** Mouse

Formulation Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin

USA) and a stabilizer.

Preparation The antibody was purified by affinity chromatography and conjugated with FITC under optimal

conditions.

Concentration 400 µg/mL

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 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.

Blue Laser (488 nm) **Excitation Laser**

The ICRF44 antibody inhibits heterotypic adhesion of granulocytes in response to fMLP. Additional Application Notes

reported applications (for the relevant formats) include: immunohistochemical staining of acetonefixed 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.

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).

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.

- 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
- 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)
- 13. Cash JL, et al. 2013. EMBO Rep. 14:999. (FC) PubMed
- 14. Larsson K, et al. 2015. PNAS. PubMed

Disclaimer

GMP RUO Flow Cytometry Antibodies. BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:

- · Batch-to-batch consistency
- · Material traceability
- Documented procedures
- Documented employee training
- · Equipment maintenance and monitoring records
- · Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- · QA review of released products

Antigen Details

Structure Integrin, type I transmembrane glycoprotein, associates with integrin β₂ (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, et al. 1995. Curr Opin Cell Biol. 7:690.

Gene ID <u>3684</u>

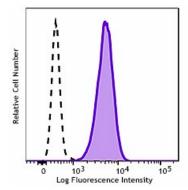
Related Protocols

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, Brilliant Violet 605™ anti-human CD11b, Brilliant Violet 510™ anti-human CD11b, Brilliant Violet 650™ anti-human CD11b, Brilliant Violet 650™ anti-human CD11b, Brilliant Violet 711™ anti-human CD11b, Brilliant Violet 755™ 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, 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

Product Data



Typical results from human peripheral blood Granulocytes stained either with ICRF44 FITC used at 5 µL/test (filled histogram) or with an isotype control (open histogram).

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