APC/Fire™ 810 anti-human CD11b Antibody

Catalog# / Size	301371 / 25 tests 301372 / 100 tests
Clone	ICRF44
Regulatory Status	RUO
Workshop	IV M047
Other Names	Integrin αM 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 APC/Fire™ 810 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 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. * APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm. Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect APC/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our Fire Dyes page.
Excitation Laser	Red Laser (633 nm)
Application Notes	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 microscopy[5], stimulation of monocytes[3], blocking of heterotypic PMN aggregation[8], and blocking of granulocyte activation[12]. 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.
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)

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RRID

AB_3683301 (BioLegend Cat. No. 301371)
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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, *et al.* 1995. *Curr Opin Cell Biol.* 7:690.
Gene ID	3684

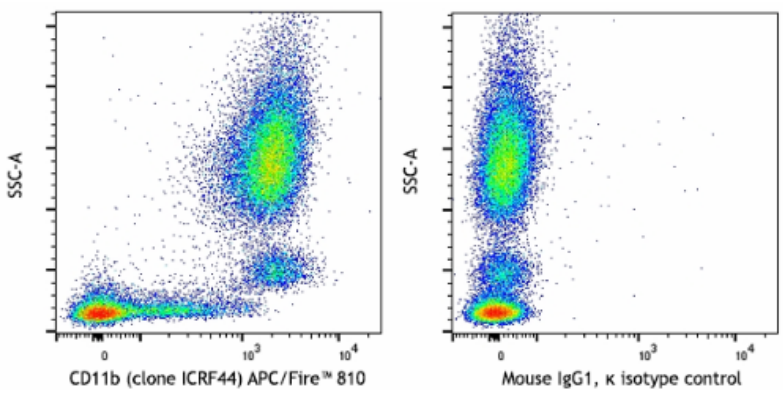
Related Protocols

- 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) APC/Fire™ 810 (left) or mouse IgG1, κ APC/Fire™ 810 isotype control (right).

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