

Alexa Fluor® 647 anti-human CD11b (activated) Antibody

Catalog# / Size	301413 / 25 tests 301414 / 100 tests
Clone	CBRM1/5
Regulatory Status	RUO
Other Names	Integrin α_M chain, C3biR, CR3, Mac-1, Mo1, ITGAM
Isotype	Mouse IgG1, κ
Description	The CBRM1/5 antibody reacts with an activated form of human CD11b, 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 as well as 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
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 Alexa Fluor® 647 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	The CBRM1/5 antibody recognizes a subset of CD11b molecules on neutrophils and monocytes activated with chemoattractants or phorbol-esters. This antibody does not recognize "non-activated" CD11b. The epitope recognized by CBRM1/5 is contained in the I domain of the α chain. Clone CBRM1/5 binds the I domain, close to the ligand binding site. It recognizes a conformational change of the integrin ⁹ . Additional reported applications (for the relevant formats) include: immunoprecipitation, and blocking cell adhesion to fibrinogen and ICAM-1 ¹ . The CBRM1/5 antibody binds specifically to the activated form of CD11b. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 301408).
Application References	1. Diamond M, <i>et al.</i> 1993. <i>J. Cell Biol.</i> 120:545. (Block) 2. Bryn T, <i>et al.</i> 2006. <i>J. Immunol.</i> 176:7361. PubMed
(PubMed link indicates	

- BioLegend citation)**
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RRID AB_2715797 (BioLegend Cat. No. 301413)
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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, T cell subset, B cell subset
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, NK cells, T cells, Tregs
Biology Area	Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Costimulatory Molecules
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Stewart M, <i>et al.</i> 1995. <i>Curr. Opin. Cell Biol.</i> 7:690. 2. Petty H, <i>et al.</i> 1996. <i>Immunol. Today</i> 17:209.
Gene ID	3684

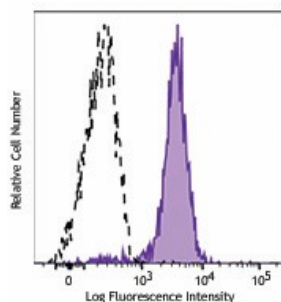
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Cyanine7 anti-human CD11b (activated), FITC anti-human CD11b (activated), PE anti-human CD11b (activated), Purified anti-human CD11b (activated), APC anti-human CD11b (activated), Alexa Fluor® 647 anti-human CD11b (activated), APC/Fire™ 750 anti-human CD11b (activated), PerCP/Cyanine5.5 anti-human CD11b (activated), Biotin anti-human CD11b (activated), PE/Dazzle™ 594 anti-human CD11b (activated), Ultra-LEAF™ Purified anti-human CD11b (activated)

Product Data



PMA-activated (10 minutes) human peripheral blood granulocytes were stained with CD11b (clone CBRM1/5) Alexa Fluor® 647 (filled histogram) or mouse IgG1, κ Alexa Fluor® 647 isotype control (open histogram).

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