

## PE/Dazzle™ 594 anti-human CD11b (activated) Antibody

<b>Catalog# / Size</b>	301421 / 25 tests 301422 / 100 tests
<b>Clone</b>	CBRM1/5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Integrin $\alpha_M$ chain, C3biR, CR3, Mac-1, Mo1, ITGAM
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	The CBRM1/5 antibody reacts with an activated form of human CD11b, a 165-170 kD type I transmembrane glycoprotein also known as $\alpha_M$ integrin, Mac-1, CR3, and C3biR. CD11b non-covalently associates with integrin $\beta_2$ (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

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<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 PE/Dazzle™ 594 under optimal conditions.
<b>Concentration</b>	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, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.  * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	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 $\alpha$ chain. Clone CBRM1/5 binds the I domain, close to the ligand binding site. It recognizes a conformational change of the integrin <sup>9</sup> .  Additional reported applications (for the relevant formats) include: immunoprecipitation, and blocking cell adhesion to fibrinogen and ICAM-1 <sup>1</sup> . The CBRM1/5 antibody binds specifically to the activated form of CD11b. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2 $\mu$ m filtered) is recommended for functional assays (Cat. No. 301408).
<b>Application References</b>	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. <a href="#">PubMed</a> 3. Sithu SD, <i>et al.</i> 2007. <i>J. Biol. Chem.</i> doi:10.1074/jbc.M611273200. 4. Barthel SR, <i>et al.</i> 2006. <i>Am J. Respir Cell Mol Biol.</i> 35:378. <a href="#">PubMed</a> 5. Pillay J, <i>et al.</i> 2010. <i>J. Leukocyte Biol.</i> 88:211. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	

6. Wilson RP, *et al.* 2011. *Infect Immun.* 79:830. [PubMed](#)
7. Koleva RI, *et al.* 2012. *Blood.* 119:4878. [PubMed](#).
8. Eleftherious D, *et al.* 2012. *Neurology.* 79:2089. [PubMed](#)
9. Ovig C, *et al.* 1999. *Proc. Natl. Acad. Sci. USA* 96:2215.
10. Muller-Edenborn B, *et al.* 2014. *Br J Anaesth.* [PubMed](#)
11. Cash JL, *et al.* 2013. *EMBO Rep.* 14:999. (FC) [PubMed](#)

**RRID** AB\_2800733 (BioLegend Cat. No. 301421)  
 AB\_2800734 (BioLegend Cat. No. 301422)

## Antigen Details

<b>Structure</b>	Integrin, type I transmembrane glycoprotein, associates with integrin $\beta_2$ (CD18), 165-170 kD
<b>Distribution</b>	Granulocytes, monocytes/macrophages, dendritic cells, NK cells, T cell subset, B cell subset
<b>Function</b>	Adhesion, phagocytosis, chemotaxis, neutrophil activation
<b>Ligand/Receptor</b>	ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4, CD14, CD23, heparin, iC3b, fibrinogen, factor X
<b>Cell Type</b>	B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, NK cells, T cells, Tregs
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Costimulatory Molecules
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	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.
<b>Gene ID</b>	<a href="#">3684</a>

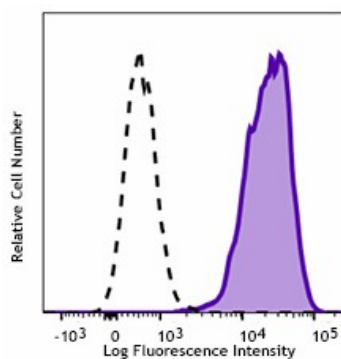
## Related Protocols

[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 human peripheral blood granulocytes were stained with anti-human CD11b (clone CBRM1/5) PE/Dazzle™ 594 (Filled Histogram) or Mouse IgG1,  $\kappa$  PE/Dazzle™ 594 Isotype Control (open histogram).

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