

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

**Catalog # / Size:** 2107110 / 100 tests  
2107105 / 25 tests

**Clone:** CBRM1/5

**Isotype:** Mouse IgG1, κ

**Immunogen:** Recombinant mouse CD163 extracellular domain

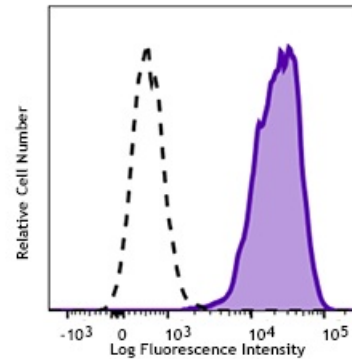
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

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

**Workshop Number:** IV T085

**Concentration:** Lot-specific



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

**Applications:**

**Applications:** Flow Cytometry

**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.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 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<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.

**Application  
References:**

1. Diamond M, et al. 1993. *J. Cell Biol.* 120:545. (Block)
  2. Bryn T, et al. 2006. *J. Immunol.* 176:7361. [PubMed](#)
  3. Sithu SD, et al. 2007. *J. Biol. Chem.* doi:10.1074/jbc.M611273200.
  4. Barthel SR, et al. 2006. *Am J. Respir Cell Mol Biol.* 35:378. [PubMed](#)
  5. Pillay J, et al. 2010. *J. Leukocyte Biol.* 88:211. [PubMed](#)
  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. Oxvig 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](#)
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**Description:** 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.

**Antigen  
References:**

1. Stewart M, et al. 1995. *Curr. Opin. Cell Biol.* 7:690.
2. Petty H, et al. 1996. *Immunol. Today* 17:209.