

**PE anti-human CD11b (activated)**

**Catalog # / Size:** 2107025 / 25 tests  
2107030 / 100 tests

**Clone:** CBRM1/5

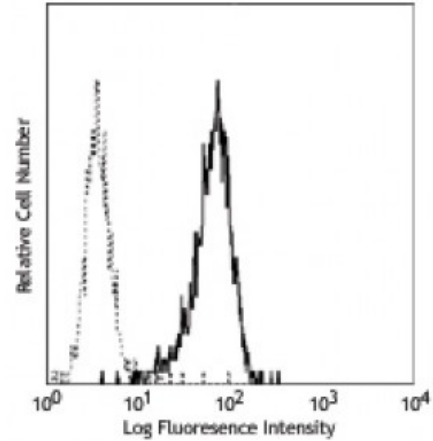
**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human

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

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

**Concentration:** Lot-specific



PMA activated human granulocytes stained with CBRM1/5 FITC

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**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  $\alpha$  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-11. 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).

**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](#)

**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.