

Biotin anti-human CD11b (activated)

Catalog # / Size: 2107080 / 100 µg

Clone: CBRM1/5

Isotype: Mouse IgG1, κ

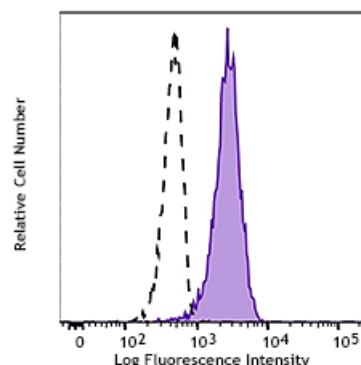
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: IV N231

Concentration: 0.5

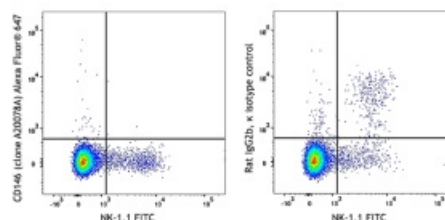


PMA-activated (10 minutes) human peripheral blood granulocytes were stained with CD11b (clone CBRM1/5) Biotin (filled histogram) or mouse IgG1, κ Biotin isotype control (open histogram) followed by Streptavidin PE.

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 ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.



C57BL/6 mouse splenocytes were stained with anti-mouse NK-1.1 FITC and anti-mouse CD146 (clone A20078A) Alexa Fluor® 647 (left), or rat IgG2b, κ Alexa Fluor® 647 isotype control (right).

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 integrin⁹.

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/μg, Azide-Free, 0.2 μm 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 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.

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