

Product Data Sheet

LEAF™ Purified anti-human CD11b (activated)

Catalog # / Size: 301407 / 50 µg

Clone: CBRM1/5

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.

Applications:

Applications: FC - *Quality tested*
 IP, Block - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation, and blocking¹ of the binding of ICAM-1 and fibrinogen. 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

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 β₂ (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. 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. The CBRM1/5 antibody blocks cell adhesion to fibrinogen and ICAM-1.

Antigen References:

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

Related Products:

Product
 LEAF™ Purified Mouse IgG1, κ Isotype Ctrl
 Cell Staining Buffer
 RBC Lysis Buffer (10X)

Clone
 MOPC-21

Application
 FC, ICFC, WB, IP, ICC, IF, FA
 FC, ICC, ICFC
 FC, ICFC



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