

**FITC anti-human CD11c**

**Catalog # / Size:** 2108020 / 100 tests  
2108015 / 25 tests

**Clone:** 3.9

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

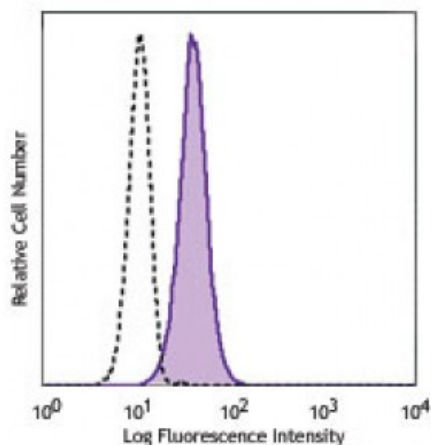
**Reactivity:** Human

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

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

**Workshop Number:** III NL707

**Concentration:** Lot-specific



Human peripheral blood granulocytes were stained with CD11c (clone 3.9) FITC (filled histogram) or mouse IgG1,  $\kappa$  FITC 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. **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:** Clone 3.9 preferentially binds the activated form of CD11c, is specific for the I domain of CD11c, and is able to partially block the binding of CD11c and ICAM-4. 3.9 binding is divalent cation dependent<sup>12</sup>. While analyzing blood, it is best to use heparin as the anti-coagulant and not EDTA. Since the ability of clone 3.9 to bind to its target is divalent cation dependent, the usage of EDTA as an anti-coagulant may be detrimental to staining due to its chelating properties.

Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections<sup>4</sup>, and functional assays<sup>5,6</sup>. The LEAF<sup>™</sup> purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 301616). For highly sensitive assays, we recommend Ultra-LEAF<sup>™</sup> purified antibody (Cat. No. 301632) with a lower endotoxin limit than standard LEAF<sup>™</sup> purified antibodies (Endotoxin <0.01 EU/microg).

- Application References:**
- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
  - Knapp W, *et al.* 1989. Leucocyte Typing IV Oxford University Press. New York.
  - McMichael A, *et al.* Eds. 1987. Leucocyte Typing III Oxford University Press. New York.
  - Vainer B, *et al.* 2000. *Am. J. Surg. Pathol.* 24:1115. (IHC)
  - Ottonello L, *et al.* 1999. *Blood* 93:3505.
  - Metelitsa LS, *et al.* 2002. *Blood* 99:4166.
  - Sadhu C, *et al.* 2007. *J. Leukoc. Biol.* doi:10.1189/jlb.1106680. [PubMed](#)
  - Ihanus E, *et al.* 2007. *Blood* 109:802-810.

9. Gurer C, *et al.* 2008. *Blood* 112:1231. [PubMed](#)
  10. Asai A, *et al.* 2009. *J. Lipid Res.* 50:95. [PubMed](#)
  11. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
  12. Sadhu C, *et al.* 2008. *J. Immunoass. Immunoch.* 29:42. (FC)
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**Description:** CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin  $\alpha_X$  and CR4. CD11c non-covalently associates with integrin  $\beta_2$  (CD18) and is expressed on monocytes/macrophages, dendritic cells, granulocytes, NK cells, and subsets of T and B cells. CD11c has been reported to play a role in adhesion and CTL killing through its interactions with fibrinogen, CD54, and iC3b.

**Antigen**  
**References:**

1. Petty H. 1996. *Immunol. Today* 17:209.
2. Springer T. 1994. *Cell* 76:301.
3. Ihanus E, *et al.* 2007. *Blood* 109:802-810.