

## Alexa Fluor® 647 anti-human CD11c

**Catalog # / Size:** 301619 / 25 tests  
301620 / 100 tests  
301622 / 100 µg

**Clone:** 3.9

**Isotype:** Mouse IgG1, κ

**Workshop Number:** III NL707

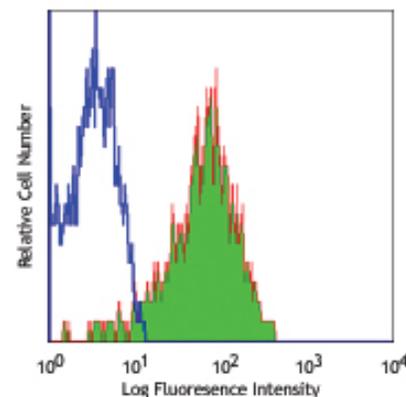
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, African Green, Cynomolgus, Rhesus, Squirrel Monkey

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

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

**Concentration:** test sizes: lot-specific; µg size: 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood monocytes stained with 3.9 Alexa Fluor® 647

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.  
**For test sizes**, the suggested use of this reagent for immunofluorescent staining is 5 µl per million cells or 5 µl per 100 µl of whole blood.  
**For µg size**, the suggested use of this reagent for immunofluorescent staining is ≤2 µg per 10<sup>6</sup> 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.  
\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.  
\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** Clone 3.9 preferentially binds the activated form of CD11c, is specific for 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> 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™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301616). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 301632) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

**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.
- Gurer C, *et al.* 2008. *Blood* 112:1231. PubMed
- Asai A, *et al.* 2009. *J. Lipid Res.* 50:95. PubMed
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Sadhu C, *et al.* 2008. *J. Immunoass. Immunoch.* 29:42. (FC)

**Description:** CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin α<sub>x</sub> and CR4. CD11c non-covalently associates with integrin β2 (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:**

- Petty H. 1996. *Immunol. Today* 17:209.
- Springer T. 1994. *Cell* 76:301.



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3. Ihanus E, *et al.* 2007. *Blood* 109:802-810.

<b>Related Products:</b>	<b>Product</b>	<b>Clone</b>	<b>Application</b>
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (FC)	MOPC-21	FC, IF
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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