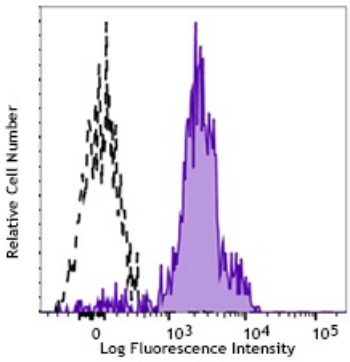
SONY

Product Data Sheet

Alexa Fluor® 700 anti-human CD11c

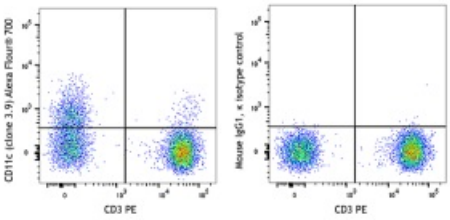
Catalog # / Size:	2108240 / 100 tests 2108235 / 25 tests
Clone:	3.9
Isotype:	Mouse IgG1, κ
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.
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 monocytes were stained with Alexa Flour® 700 anti-human CD11c (clone 3.9) (filled histogram) or mouse IgG1, κ Alexa Flour® 700 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. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.



Human peripheral blood lymphocytes were stained with PE anti-human CD3 and Alexa Flour® 700 anti-human CD11c (clone 3.9) (left) or mouse IgG1, κ Alexa Flour® 700 isotype control (right).

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[12]. 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[4], and functional assays[5,6].

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
2. Knapp W, *et al.* 1989. Leucocyte Typing IV Oxford University Press. New York.
3. McMichael A, *et al.* Eds. 1987. Leucocyte Typing III Oxford University Press. New York.
4. Vainer B, *et al.* 2000. *Am. J. Surg. Pathol.* 24:1115. (IHC)
5. Ottonello L, *et al.* 1999. *Blood* 93:3505.
6. Metelitsa LS, *et al.* 2002. *Blood* 99:4166.
7. Sadhu C, *et al.* 2007. *J. Leukoc. Biol.* doi:10.1189/jlb.1106680. PubMed
8. 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)

Description:

CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin α_X 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:

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.