Product Data Sheet

Biotin anti-human CD11c

Catalog # / Size: 2108060 / 100 µg

> Clone: 3.9

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

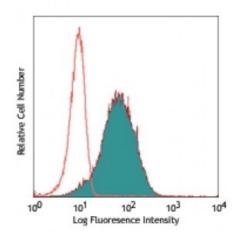
chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Phosphate-buffered solution, pH 7.2, Formulation:

containing 0.09% sodium azide.

Workshop Number: III NL707

Concentration: 0.5



Human peripheral blood granulocytes stained with

biotinylated 3.9, followed by Sav-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 ≤2.0 microg per million cells in 100 microL volume. 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 dependent¹². 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 sections4, and functional assays 5,6 . The LEAF $^{\text{TM}}$ 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/microg).

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)

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 $\beta 2$ (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.