

TECHNICAL DATA SHEET

violetFluor™ 450 Anti-Human/Mouse CD11b (M1/70)

Catalog Number: 75-0112

PRODUCT INFORMATION

Contents: violetFluor™ 450 Anti-Human/Mouse CD11b (M1/70)

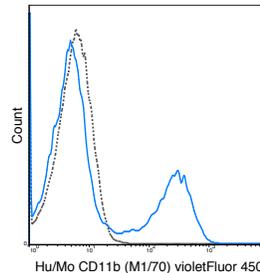
Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

Clone: M1/70

Reactivity: Human, Mouse

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃, 0.1% gelatin, pH7.2



C57Bl/6 bone marrow cells were stained with 0.125 ug violetFluor 450 Anti-Hu/Mo CD11b (75-0112) (solid line) or 0.125 ug violetFluor 450 Rat IgG2b isotype control (dashed line).

DESCRIPTION

The M1/70 antibody reacts with human and mouse CD11b, also known as integrin alpha M. This 165-170 kDa cell surface glycoprotein is part of a family of integrin receptors that mediate adhesion between cells (cell-cell) and components of the extracellular matrix, e.g. fibrinogen (cell-matrix). In addition, integrins are active signaling receptors which recruit leukocytes to inflammatory sites and promote cell activation. Complete, functional integrin receptors consist of distinct combinations of integrin chains which are differentially expressed. Integrin alpha M (CD11b) assembles with Integrin beta-2 (CD18) into a receptor known as Macrophage Antigen-1 (Mac-1) or complement receptor type 3 (CR3). This receptor binds and induces intracellular signaling through ICAM-1 on endothelial cells and can also facilitate removal of iC3b bearing foreign cells. The M1/70 antibody is widely used as a marker for CD11b expression on mouse macrophages, granulocytes, neutrophils, and NK cells. The antibody is also reported to be cross-reactive for Rhesus macaque CD11b.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

violetFluor™ 450 dye is excited by the violet (405 nm) laser and has a peak emission of 450 nm. The most common band pass filters for this dye are 440/40 or 450/50. violetFluor™ 450 can be used as an alternative for Pacific Blue®, BD Horizon™ V450 or eFluor® 450.

REFERENCES

Lefort CT, Rossaint J, Moser M, Petrich BG, Zarbock A, Monkley SJ, Critchley DR, Ginsberg MH, Fassler R, and Ley K. 2012. *Blood*. 119:4275-4282. (in vitro blocking)Grewal JS, Pilgrim MJ, Grewal S, Kasman L, Werner P, Bruorton ME, London SD, and London L. 2011. *FASEB J*. 25:1680-1696. (immunofluorescence microscopy – frozen tissue)Kim W-K, Sun Y, Do H, Autissier P, Halpern EF, Piatak M, Lifson JD, Burdo TH, McGrath MS, and Williams K. 2010. *J. Leukoc. Biol*. 87: 557-567. (flow cytometry – Rhesus macaque)Roland CL, Dineen SP, Lynn KD, Sullivan LA, Dellinger MT, Sadegh L, Sullivan JP, Shames DS, and Brekken RA. 2009. *Mol. Cancer Ther*. 8:1761-1771. (immunofluorescence microscopy – frozen tissue)Sorg H, Lorch B, Jaster R, Fitzner B, Ibrahim S, Holzhueter S, Nizze H, and Vollmar B. 2008. *Am. J. Physiol. Gastrointest. Liver Physiol*. 295: G1274-1280. (immunohistochemistry - formalin-fixed paraffin embedded tissue)Kim DD, Miwa T, Kimura Y, Schwendener RA, van Lookeren Campagne M, and Song W-C. 2008. *Blood*. 112:1109-1119. (in vivo blocking)Ou R, Zhang M, Huang L, Flavell RA, Koni PA, and Moskophidis D. 2008. *J. Virol*. 82:2952-2965. (immunohistochemistry – OCT embedded frozen tissue)Nutt SL, Metcalf D, D'Amico A, Polli M, and Wu L. 2005. *J. Exp. Med*. 201:221-231. (immunomagnetic bead depletion)Whiteland JL, Nicholls SM, Shimeld C, Easty DL, Williams NA, and Hill TJ. 1995. *J. Histochem. Cytochem*. 43:313-320. (immunohistochemistry – frozen tissue, paraffin embedded tissue)Miller LJ, Schwarting R, and Springer TA. 1986. *J. Immunol*. 137:2891-2900. (immunoprecipitation)

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