

TECHNICAL DATA SHEET

violetFluor™ 500 Anti-Human/Mouse CD11b (M1/70)

Catalog Number: 85-0112

PRODUCT INFORMATION

Contents: violetFluor™ 500 Anti-Human/Mouse CD11b

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

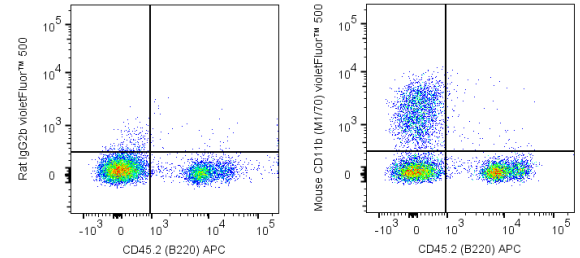
Clone: M1/70

Reactivity: Human, Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C protected from light

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



C57Bl/6 bone marrow cells were stained with APC Anti-Mouse CD45R (B220) (20 -0452) and 0.125 ug violetFluor™ 500 Anti-Mouse CD11b (85-0112) (right panel) or 0.125 ug violetFluor™ 500 Rat IgG2b isotype control (left panel).

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). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

violetFluor™ 500 dye is excited by the violet (405 nm) laser and has a peak emission of 500 nm. The recommended band pass filter for this dye is 525/20. violetFluor™ 500 can be used as an alternative for BD Horizon™ V500, eFluor® 506 or Pacific Orange®.

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,

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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