

TECHNICAL DATA SHEET

violetFluor™ 450 Anti-Human CD11c (3.9)

Catalog Number: 75-0116

PRODUCT INFORMATION

Contents: violetFluor™ 450 Anti-Human CD11c (3.9)

Isotype: Mouse IgG1, kappa

Concentration: 5 uL (0.5 ug)/test

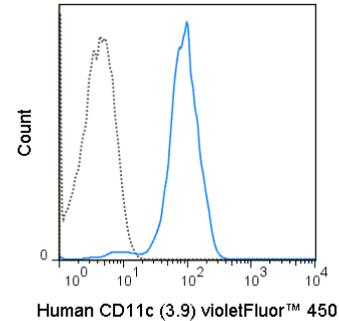
Clone: 3.9

Reactivity: Human

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



Human peripheral blood monocytes were stained with 5 uL (0.5 ug) violetFluor™ 450 Anti-Human CD11c (75-0116) (solid line) or 0.5 ug violetFluor™ 450 Mouse IgG1 isotype control (dashed line).

DESCRIPTION

The 3.9 antibody reacts with human CD11c, also known as integrin alpha X. This 150 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 X (CD11c) assembles with Integrin beta-2 (CD18) into a receptor known as CR4 which can bind and induce signaling through ICAMs and VCAM-1 on endothelial cells and can also facilitate removal of iC3b bearing foreign cells. The 3.9 antibody is widely used as a marker for CD11c expression on dendritic cells (DC), often in parallel with markers for CD11b, for identification of developmental stages and mature subsets of this cell type. CD11c is prominently expressed on tissue macrophages, and is also detected on activated neutrophils, granulocytes, some types of activated T cells and intestinal intraepithelial lymphocytes (IEL). The antibody is reported to be cross-reactive with Baboon, Chimpanzee, Cynomolgus and Rhesus CD11c.

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 pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

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

Robinson BA, Estep RD, Messaoudi I, Rogers KS, and Wong SW. J. Virol. 2012. 86:2197-2211. (Flow cytometry – rhesus macaque) Campillo-Gimenez L, Laforge M, Fay M, Brussel A, et. al. 2010. J. Virol. 84(4):1838-1846. (Flow cytometry – African green monkey, rhesus macaque) Sadhu C, Hendrickson L, Dick KO, Potter TG, and Staunton DE. 2008. J. Immunoassay Immunochem. 29(1):42-57. (in vitro blocking) Arndt S, Melle C, Mondal K, Klein G, von Eggeling F, and Bosserhoff A-K. 2007. J. Leukoc. Biol. 82:1466-1472. (Immunoprecipitation) McGreal EP, Ikewaki N, Akatsu H, Morgan BP, and Gasque P. 2002. 168:5222-5232. (Immunofluorescence microscopy – frozen tissue)

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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.