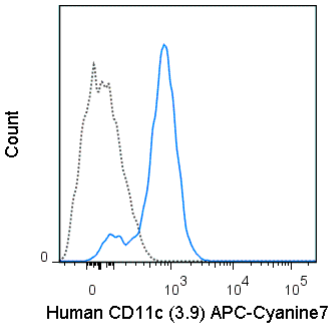
TECHNICAL DATA SHEET

APC-Cyanine7 Anti-Human CD11c (3.9)

Catalog Number: 25-0116

PRODUCT INFORMATION

Contents:	APC-Cyanine7 Anti-Human CD11c (3.9)
Isotype:	Mouse IgG1, kappa
Concentration:	5ul (0.5ug)/test
Clone:	3.9
Reactivity:	Human
Use By:	6 months from date of receipt
Storage Conditions:	2-8°C protected from light
Formulation:	10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH7.2



Human peripheral blood monocytes were stained with 5 uL (0.5 ug) APC-Cyanine7 Anti-Human CD11c (25-0116) (solid line) or 0.5 ug APC-Cyanine7 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 1x10e5 to 1x10e8 cells.

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)