

# redFluor™ 710 Anti-Human CD11c (3.9) Antibody

Catalog # ATB10390

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Specification
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## redFluor<sup>™</sup> 710 Anti-Human CD11c (3.9) Antibody - Product Information

Application Isotype Concentration Reactivity Formulation

Host

FC Mouse IgG1, kappa 5 uL (1 ug)/test Human 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2 Mouse

### redFluor™ 710 Anti-Human CD11c (3.9) Antibody - Additional Information

Gene ID Gene Name Alternative Name(s) CR4, integrin \_X, ITGAX 3687 ITGAX

Format redFluor™ 710

Storage Conditions 2-8°C protected from light

### redFluor<sup>™</sup> 710 Anti-Human CD11c (3.9) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

redFluor<sup>™</sup> 710 Anti-Human CD11c (3.9) Antibody - Images





Human peripheral blood monocytes were stained with 5 uL (1.0 ug) redFluor<sup>™</sup>710 Anti-Human CD11c (ATB10390) (solid line) or 1.0 ug redFluor<sup>™</sup>710 Mouse IgG1 isotype control (dashed line).

## redFluor™ 710 Anti-Human CD11c (3.9) Antibody - Background

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.

## redFluor<sup>™</sup> 710 Anti-Human CD11c (3.9) Antibody - 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)