#### Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488

## **Antibodies**

Hamster (Armenian) monoclonal IgG antibody against mouse CD11c, Alexa

Fluor® 488-conjugated

Catalog #60002AD #60002AD.1 100 μg 0.5 mg/mL 25 μg 0.5 mg/mL



Scientists Helping Scientists™ | www.stemcell.com

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713 INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## **Product Description**

The N418 antibody reacts with CD11c ( $\alpha$ X integrin), a 150 kDa type 1 transmembrane glycoprotein that associates non-covalently with CD18 ( $\beta$ 2 integrin) to form a heterodimeric cell surface adhesion receptor. Through its interaction with ligands such as iC3b, fibrinogen, and CD54, the CD11c/CD18 receptor is involved in several immune response processes, including cell migration, stimulation of cytokine production by monocytes and macrophages, T cell proliferation, leukocyte recruitment, and phagocytosis. In mice, CD11c is expressed on dendritic cells, macrophages, monocytes, granulocytes, NK cells, and a subset of T cells.

Target Antigen Name: CD11c

Alternative Names: alphaX integrin, CR4, integrin alphaX chain, p150

Gene ID: 16411 Species Reactivity: Mouse

Host Species: Hamster (Armenian)

Clonality: Monoclonal

Clone: N418 lsotype: IgG

Immunogen: Mouse spleen dendritic cells

Conjugate: Alexa Fluor® 488

# **Applications**

Verified: FC

Reported: FC, ICC, IF, IHC

Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including

EasySep™ Mouse CD11c Positive Selection Kit II (Catalog #18780).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Purification: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal

conditions. The solution is free of unconjugated Alexa Fluor® 488.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to

light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry, the suggested use of this antibody is ≤ 0.25 µg per 1 x 10<sup>6</sup> cells in 100 µL. It is

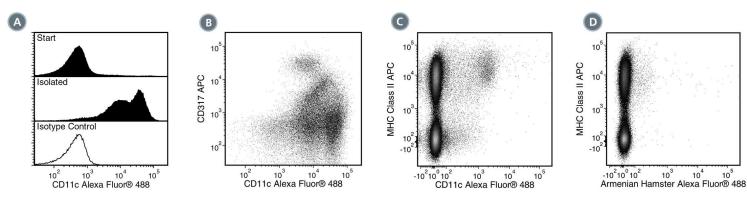
recommended that the antibody be titrated for optimal performance for each application.

#### Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488

## **Antibodies**



## Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes processed with EasySep™ Mouse CD11c Positive Selection Kit II and labeled with Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488. Histograms show labeling of splenocytes (Start) and isolated cells (Isolated). Labeling of the start cells with an Armenian hamster IgG Alexa Fluor® 488 isotype control antibody is shown in the bottom panel (solid line histogram).

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes processed with EasySep™ Mouse CD11c Positive Selection Kit II and labeled with Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488 and an anti-mouse CD317 antibody, APC.

(C) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488 and an anti-mouse MHC class II antibody, APC.

(D) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with an Armenian hamster IgG Alexa Fluor® 488 isotype control antibody and an anti-mouse MHC class II antibody, APC.

### Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

#### References

- 1. Lai JD et al. (2018) Early cellular interactions and immune transcriptome profiles in human factor VIII-exposed hemophilia A mice. J Thromb Haemost. Epub ahead of print, DOI: 10.1111/jth.13936. (FC)
- 2. Oderup C et al. (2013) Canonical and noncanonical Wnt proteins program dendritic cell responses for tolerance. J Immunol 190(12): 6126-34. (FC)
- 3. Schneider D et al. (2012) Neonatal rhinovirus infection induces mucous metaplasia and airways hyperresponsiveness. J Immunol 188(6): 2894–904. (FC)
- 4. Grewal JS et al. (2011) Salivary glands act as mucosal inductive sites via the formation of ectopic germinal centers after site-restricted MCMV infection. FASEB J 25(5): 1680–96. (IF, IHC)
- 5. Bankoti J et al. (2010) Effects of TCDD on the fate of naive dendritic cells. Toxicol Sci 115(2): 422-34. (FC)
- 6. Roland CL et al. (2009) Inhibition of vascular endothelial growth factor reduces angiogenesis and modulates immune cell infiltration of orthotopic breast cancer xenografts. Mol Cancer Ther 8(7): 1761–71. (FC, IHC)
- 7. You Y et al. (2009) Cutting edge: Primary and secondary effects of CD19 deficiency on cells of the marginal zone. J Immunol 182(12): 7343–7. (IF, IHC) 8. Cervantes-Barragan L et al. (2007) Control of coronavirus infection through plasmacytoid dendritic-cell-derived type I interferon. Blood 109(3): 1131–7.
- 9. Turnquist HR et al. (2007) Rapamycin-conditioned dendritic cells are poor stimulators of allogeneic CD4+ T cells, but enrich for antigen-specific Foxp3+ T regulatory cells and promote organ transplant tolerance. J Immunol 178(11): 7018–31. (FC)
- 10. Chin RK et al. (2006) Lymphotoxin pathway-directed, autoimmune regulator-independent central tolerance to arthritogenic collagen. J Immunol 177(1): 290–7. (IF, IHC)
- 11. Kishimoto T et al. (Eds.). (1998) Leucocyte Typing VI: White Cell Differentiation Antigens. New York: Garland Publishing Inc.
- 12. Barclay AN et al. (Eds.). (1997) The Leucocyte Antigen Factsbook, Second Edition (pp. 149-51). New York: Academic Press.
- 13. Metlay JP et al. (1990) The distinct leukocyte integrins of mouse spleen dendritic cells as identified with new hamster monoclonal antibodies. J Exp Med 171(5): 1753–71. (FA/Blocking, FC, IHC, IP)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2018 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Canada Inc. CyTOF is a registered trademark of Fluidigm Corporation. All other trademarks are the property of their respective holders. Alexa Fluor and Pacific Blue are trademarks of Life Technologies Corporation. Antibodies conjugated to Alexa Fluor® or Pacific Blue™ are licensed for internal research use only and sale is expressly conditioned on the buyer not using the antibody for manufacturing, performing a service or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing®lifetech.com. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.