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

### **Antibodies**

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

Fluor® 488-conjugated

Catalog #60002AD.1

#60002AD

25 μg 0.5 mg/mL 100 μg 0.5 mg/mL



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# **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, integrin alphaX chain, CR4, p150

Gene ID: 16411 Species Reactivity: Mouse

Host Species: Hamster (Armenian)

Clonality: Monoclonal

Clone: N418 Isotype: 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 (Catalog #18758) and EasySep™ Mouse CD11c Positive

Selection Kit II (Catalog #18780).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; 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

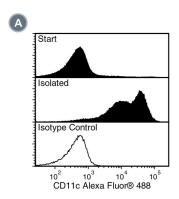
light. For product expiry date, please request a lot-specific Certificate of Analysis from

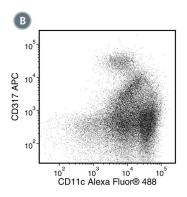
techsupport@stemcell.com.

Directions for Use: For flow cytometry the suggested use of this antibody is ≤0.25 µg per 1 x 10e6 cells in 100 µL volume. It is

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

#### Data





(A) Flow cytometry analysis of C57BL/6 mouse splenocytes processed with the 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 (open histogram).

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

### **Related Products**

PRODUCT NAME	CATALOG #	SIZE
Anti-Mouse CD11c Antibody, Clone N418	60002	Coming soon
Anti-Mouse CD11c Antibody, Clone N418, PE	60002PE.1	50 µg
Anti-Mouse CD11c Antibody, Clone N418, PE	60002PE	200 µg
Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488	60002AD.1	25 µg
Anti-Mouse CD11c Antibody, Clone N418, Alexa Fluor® 488	60002AD	100 µg

#### References

- 1. Metlay JP, et al. The distinct leukocyte integrins of mouse spleen dendritic cells as identified with new hamster monoclonal antibodies. J Exp Med 171(5): 1753-71, 1990 (IHC, IP)
- 2. Barclay AN, et al. Eds. The Leukocyte Antigens Facts Book, 2nd Edition. Academic Press, New York, pp. 161-62, 1997
- 3. Kishimoto T, et al. Eds. Leukocyte Typing VI. White Cell Differentiation Antigens. Garland Publishing Inc, New York, pp 1118-19, 1998
- 4. Chin RK, et al. Lymphotoxin pathway-directed, autoimmune regulator-independent central tolerance to arthritogenic collagen. J Immunol 177(1): 290-97, 2006 (IF)
- 5. Cervantes-Barragan L, et al. Control of coronavirus infection through plasmacytoid dendritic-cell-derived type I interferon. Blood 109(3): 1131-37, 2007 (FC)
- 6. Turnquist HR, et al. 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, 2007 (FC)
- 7. Roland CL, et al. Inhibition of vascular endothelial growth factor reduces angiogenesis and modulates immune cell infiltration of orthotopic breast cancer xenografts. Mol Cancer Res 8(7): 1761-71, 2009 (IHC, FC)
- 8. You Y, et al. Cutting edge: Primary and secondary effects of CD19 deficiency on cells of the marginal zone. J Immunol 182(12): 7343-47, 2009 (IF)
- 9. Bankoti J, et al. Effects of TCDD on the fate of naive dendritic cells. Toxicol Sci 115(2): 422-34, 2010 (FC)
- 10. Eisenach PA, et al. MT1-MMP regulates VEGF-A expression through a complex with VEGFR-2 and Src. J Cell Sci 123(23): 4182-93, 2010

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