

# Technical Data Sheet

## FlowMAb FITC anti-mouse CD11c



**Attention:** Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

### Lot Specific Information

**Lot Number:** Lot Specific\*  
**Volume:** Lot Specific\*  
**Concentration:** Lot Specific\* (generally 4 to 11 mg/ml) \*  
**Total Protein:** Lot Specific\*

\*This information will be noted on the certificate of analysis that ships with this product.

### Product Information

**Catalog Number:** FM0038-FITC  
**Clone:** N418  
**Isotype:** Armenian Hamster IgG2  
**Conjugation:** FITC  
**Excitation Source:** Blue 488 nm  
**Excitation Max:** 494 nm  
**Emission Max:** 518 nm  
**Immunogen:** Mouse spleen dendritic cells  
**Reported Applications:** Flow cytometry Immunohistochemistry (frozen) Immunohistochemistry (paraffin) Immunofluorescence  
**Formulation:** PBS, pH 7.0  
Contains 0.09% Sodium Azide  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein A

### Description

The N418 monoclonal antibody reacts with mouse CD11c, the most widely used defining marker for murine dendritic cells (DCs). CD11c is also known as integrin alpha-X (Itgax) and CD11 antigen-like family member C. CD11c is a 150-kDa single-pass type I membrane protein of the integrin alpha chain family, and its related members include CD11a (LFA-1), CD11b (MAC-1), and CD11d (D). In terms of sequence homology, expression profiles, and ligands, CD11c bears a significant resemblance to CD11b and CD11d. Most DCs, monocytes, tissue macrophages, and NK cells express CD11c on their plasma membranes, while neutrophils express it at a low level. CD11c binds with cell adhesion molecules (e.g., ICAM-1, ICAM-4), LPS from bacterial cell walls, iC3b complement protein, and fibrinogen, as well as collagen. Pioneering studies revealed that CD11c mediates phagocytosis of iC3b-opsonized particles in vitro, recognizing it as complement receptor 4 (Cr4). Researchers suggest that CD11c contributes to antigen presentation by DCs and mediates inflammatory responses in vivo. Due to its high expression on immature antigen DCs, CD11c is often considered an extremely effective immunotarget in experimental studies. The N418 monoclonal antibody specifically binds on the surface of mouse DCs, and it does not bind peritoneal macrophages, B cells, or lymph node cells. The N418 antibody does not block dendritic cell binding to T cells. This fluorescein isothiocyanate (FITC)-conjugated version of the N418 antibody is useful for flow cytometry, immunofluorescence, immunohistochemistry (frozen), and immunohistochemistry (paraffin) applications.

### Storage

Store at the stock concentration at 4°C and protected from prolonged exposure to light. **Do not freeze.**

### Protocol Information

It is recommended that the reagent be carefully titrated for optimal performance in the assay of interest.

## Application References

For a complete list of references, visit [https://bioxcell.com/fm0038-fitc?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/fm0038-fitc?bxcs=9k1b3a#tab_references) or scan the QR code below.



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