Technical Data Sheet

InVivoMAb 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:	**BE0038**
Clone:	**N418**
Isotype:	Armenian Hamster IgG2
Recommended Isotype Control(s):	InVivoMAb polyclonal Armenian hamster IgG
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Mouse spleen dendritic cells
Reported Applications:	*in vivo* targeting of dendritic cells Functional assays Flow cytometry Immunohistochemistry (frozen) Immunohistochemistry (paraffin) Immunofluorescence Immunoprecipitation
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/µg) Determined by LAL gel clotting assay
Purity:	>95% Determined by SDS-PAGE
Sterility:	0.2 µm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein A
Molecular Weight:	150 kDa

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 the context of sequence homology, expression profiles, and ligands, CD11c is substantially like CD11b and CD11d. CD11c is expressed on the plasma membranes of most DCs, monocytes, tissue macrophages, NK cells, and at a low level in neutrophils. 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. CD11c's biological functions are not well studied, and pioneering studies showed it to mediate phagocytosis of iC3b-opsonized particles in vitro, which gave it recognition as complement receptor 4 (Cr4). CD11c is suggested to play a role in antigen presentation by the DCs and to mediate 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 antibody has also been demonstrated for targeting antigens to DCs (i.e., via CD11c), for rapid antibody generation from low immunogenic antigen targets, for anti-tumoral

immunomodulation, and for vaccine strategies. 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.

Storage

Store at the stock concentration at 4°C. **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/catalogsearch/result/?q=BE0038#tab_references or scan the QR code below.

Bio X Cell, LLC
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com