Technical Data Sheet

InVivoMAb anti-rat CD11b/c (OX42)

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:	**BE0473**
Clone:	**OX-42**
Isotype:	Mouse IgG2a, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG2a isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Peritoneal macrophages of rat
Reported Applications:	*in vivo* blocking of C3bi binding to CR3 *in vitro* blocking of C3bi binding to CR3 *in vitro* functional assay Immunoprecipitation Flow cytometry Immunofluorescence Immunohistochemistry (paraffin) Immunohistochemistry (frozen)
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 filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The OX-42 monoclonal antibody reacts with rat CD11b and CD11c. CD11b and CD11c are expressed on monocytes, macrophages, dendritic cells, NK cells, granulocytes, and microglial cells. The CD11b/c antigens are crucial in integrin biology, playing pivotal roles in cell migration during development, wound healing, cell differentiation, and apoptosis. Epitope mapping suggests that this antibody recognizes a common epitope shared between the integrin αM (CD11b) and integrin αx (CD11c) chains of these integrin molecules. The OX-42 antibody is extensively cited to bind the CR3 complement (C3bi) receptor, a heterodimer of CD11b and CD18 (integrin beta 2), also known as CR3 and Mac-1. Ligands of the CR3 receptor include C3bi, ICAM-1 (an intercellular adhesion molecule), and fibrinogen (a coagulation protein). CR3 is a mediator of cell adhesion and phagocytosis involved in a range of signaling pathways, notably TLR-4 signaling in dendritic cells and B cell receptor signaling. In functional experiments, the OX-42 antibody has been shown to inhibit the formation of complement-mediated rosettes and leukocyte migration in vitro and block iC3b binding to CR3 in vitro as well as in vivo. The CD11b/c

antigens are also expressed in neural tissues, and the OX-42 antibody is well-recognized for identifying resident microglial cells in the central nervous system (CNS).

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/be0473?bxcs=9k1b3a#tab_references or scan the QR code below.

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