abcam

ab33827

Biotin Anti-CD11b + CD11c antibody [OX42]

Anti-CD11b + CD11c antibody [OX42] conjugated to Biotin - suitable for flow cytometry, and reacts with rat samples. Clone [OX42] is a mouse monoclonal antibody cited in 18 publications.

Key facts

Isotype	IgG2b
Host species	Mouse
Conjugation	Biotin
Storage buffer	pH: 7.2 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD11b protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	OX42
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Rat
Dilution info	10 µL for 10^6 Cells

Notes	Use neat - 1/10. Use 10µl of the suggested working dilution to label 10^6 cells in 100µl. ab18418 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD11b

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Avoid freeze / thaw cycle

Notes

ab33827 recognises CD11b + CD11c expressed on most macrophages, including resident and activated peritoneal macrophages, Kupffer cells, around 35% of alveolar macrophages, dendritic cells, granulocytes and microglial cells in the brain.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD11b and CD11c also known as integrins αM and αX respectively are important proteins in the immune system. CD11b with a molecular mass of approximately 165 kDa and CD11c around 150 kDa form integrin complexes with CD18. These proteins are expressed on various immune cells including macrophages monocytes granulocytes and dendritic cells. Their expression can also be detected in a subset of B and T cells. The antibody against CD11b also termed OX-42 is often used in research to identify immune cells that express this surface protein.
Biological function summary	Integrins αM (CD11b) and αX (CD11c) facilitate key processes such as adhesion and migration of leukocytes. Both CD11b and CD11c pair with CD18 to form the Mac-1 (Macrophage-1 antigen also known as CR3) and p15095 complexes respectively.

	These complexes participate in both innate and adaptive immune responses by binding to various ligands like ICAM-1 and fibrinogen. CD11b/CD18 (Mac-1) additionally plays an essential role in phagocytosis degranulation and respiratory burst important activities for pathogen clearance.
Pathways	These integrins engage in critical signaling pathways including the NF-kappaB and MAPK pathways. They regulate the inflammatory response and cell survival. CD11b interacts closely with other proteins like ICAM-1 and C3b which are involved in these pathways. CD11c also contributes to similar pathways although it plays a more specialized role in dendritic cells impacting antigen presentation and immune regulation.
Associated diseases and disorders	CD11b and CD11c have associations with conditions like autoimmune diseases and chronic inflammatory disorders. Both proteins show altered expression levels in diseases such as rheumatoid arthritis and systemic lupus erythematosus. For instance in these diseases the Mac-1 complex (CD11b/CD18) frequently exhibits dysregulation affecting leukocyte adhesion and migration. The expression of CD11c is modified in certain leukemias and lymphomas where it correlates with disease progression and prognosis.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

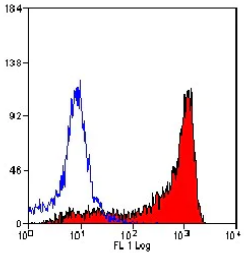
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - Biotin Anti-CD11b + CD11c antibody [OX42] (ab33827)

CD11b + CD11c Flow Cytometry staining using mouse Anti-CD11b + CD11c antibody

FACS analysis of rat peritoneal macrophages using ab33827.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.