abcam

ab313902

Alexa Fluor® 647 Anti-CD11c antibody [KB90]

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	KB90
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human

Dilution info	1/50
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information ITGAX

Function	Integrin alpha-X/beta-2 is a receptor for fibrinogen. It recognizes the sequence G-P-R in fibrinogen. It mediates cell-cell interaction during inflammatory responses. It is especially important in monocyte adhesion and chemotaxis. Functions as a receptor of the erythrocyte-specific adhesion molecule ICAM4 and mediates erythrophagocytosis (PubMed:16985175).

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
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.

Supplementary info

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

Activity summary	CD11c also known as ITGAX is a subunit of integrin proteins that plays a pivotal role in immune cell function. This protein has a molecular mass of about 150 kDa and is primarily expressed on the surface of dendritic cells monocytes and macrophages. It serves as a marker for these cells commonly utilized in applications like CD11c flow cytometry and CD11c IHC. Researchers often study

	this target using CD11c antibodies to explore immune system dynamics and cell surface characteristics.
Biological function summary	CD11c functions as an integrin alpha X subunit forming a heterodimer with the beta 2 subunit known as ITGB2. This complex is important for cell adhesion and migration processes. It mediates the binding of leukocytes to endothelial cells facilitating their migration from the bloodstream to sites of inflammation or infection. CD11c's presence on immune cells makes it essential for presenting antigens and initiating immune responses therefore having critical implications for immunity.
Pathways	CD11c plays a significant role in the immune system particularly in the leukocyte adhesion and migration pathways. It partners with proteins like ITGB2 to mediate these functions. The signaling pathways involving CD11c and related molecules regulate leukocyte trafficking and activation ensuring proper localization and function at sites of damage or infection. These pathways are essential for maintaining immune homeostasis and prompt responses to pathogens.
Associated diseases and disorders	CD11c has significant connections to autoimmune diseases and chronic inflammatory conditions. Aberrant CD11c expression or activity can contribute to the pathogenesis of conditions like rheumatoid arthritis where leukocyte migration and persistent inflammation play a role. Studies also link CD11c with proteins involved in these disorders highlighting its importance in disease progression and potential as a therapeutic target. The understanding of CD11c's role in these conditions can guide the development of treatments aimed at modulating immune responses.

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

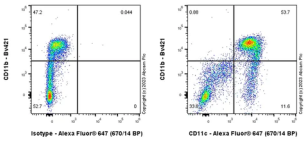
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

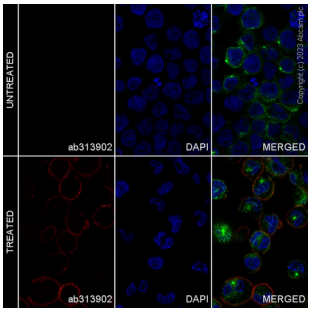
Full details and terms and conditions can be found here:
Terms & Conditions.

2 product images



Flow Cytometry - Alexa Fluor® 647 Anti-CD11c antibody [KB90] (ab313902)

Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CD11c with ab313902 at 1/500 dilution (0.1 ug)/Right compared with a Mouse IgG1 isotype control - Alexa Fluor 647 / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Cells are co-stained with CD11b conjugated to BV421. Gated on viable cells.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-CD11c antibody [KB90] (ab313902)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized THP-1 (human monocytic leukemia monocyte) cells labelling CD11c with ab313902 at 1/50 (10.0 ug/ml) dilution (Red). Confocal image showing membranous staining in THP-1 cells treated with PMA (400ng/mL, 96h). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). ab204685 Anti-beta Tubulin rabbit monoclonal antibody (Alexa Fluor® 488) was used to counterstain tubulin at 1/100 5ug/ml dilution (Green). The Nuclear counterstain was DAPI (Blue).

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