

Product datasheet

Anti-CD68 antibody [FA-11] ab53444

Recombinant

★★★★★ [25 Abreviews](#) [256 References](#) [2 Images](#)

Overview

Product name	Anti-CD68 antibody [FA-11]
Description	Rat monoclonal [FA-11] to CD68
Host species	Rat
Tested applications	Suitable for: ICC/IF, Flow Cyt (Intra) Unsuitable for: IHC-Fr
Species reactivity	Reacts with: Mouse
Immunogen	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
Positive control	Flow Cyt: RAW 264.7 cells ICC/IF: RAW 264.7
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	FA-11
Isotype	IgG2a

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab53444 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	1/50.
Flow Cyt (Intra)		1/100. Membrane permeabilisation is required for this application. ab18450 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Application notes

Is unsuitable for IHC-Fr.

Target

Function

Could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. Binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow macrophages to crawl over selectin-bearing substrates or other cells.

Tissue specificity

Highly expressed by blood monocytes and tissue macrophages. Also expressed in lymphocytes, fibroblasts and endothelial cells. Expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites.

Sequence similarities

Belongs to the LAMP family.

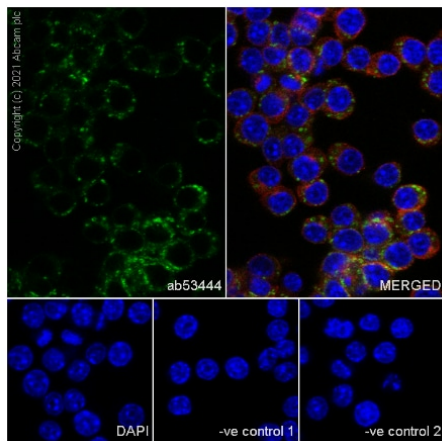
Post-translational modifications

N- and O-glycosylated.

Cellular localization

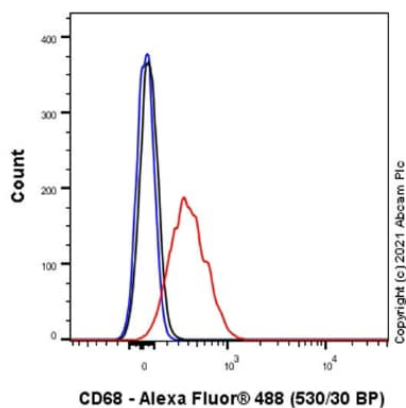
Cell membrane and Endosome membrane. Lysosome membrane.

Images



Immunocytochemistry/ Immunofluorescence - Anti-CD68 antibody [FA-11] (ab53444)

RAW 264.7 cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab53444 at 1:50 was incubated overnight at 4° C, followed by AlexaFluor® 488-conjugated Goat anti-Rat secondary antibody (**ab150157**) at 1/1000 dilution at RT for 45 min. **ab179513** Anti-beta Tubulin, used as a counterstain at 1/200 dilution, was co-incubated with ab53444 overnight at 4° C, followed by Alexa Fluor® 594 Goat Anti-Rabbit secondary (**ab150080**) at 1/1000 dilution at RT for 45 min. Nucleus were visualized using DAPI. Confocal image showing cytoplasmic staining in RAW 264.7 cell line.



Flow Cytometry (Intracellular) - Anti-CD68 antibody [FA-11] (ab53444)

Flow Cytometry analysis of 4% paraformaldehyde-fixed RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) cells labelling CD68 with AB53444 at a 1/100 dilution (1 µg) (Red) compared to Rat monoclonal IgG - Isotype Control (Black) and cells without incubation with primary antibody and secondary antibody (Blue). Goat F(ab)2 Anti-Rat IgG Fc (Alexa Fluor® 488, **ab150161**) at 1/2000 dilution was used as the secondary antibody.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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