abcam

Product datasheet

Anti-CD68 antibody [FA-11] - BSA and Azide free ab237968

Recombinant

3 References 2 Images

Overview

Product name Anti-CD68 antibody [FA-11] - BSA and Azide free

Description Rat monoclonal [FA-11] to CD68 - BSA and Azide free

Host species Rat

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF

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 <u>ab23796</u> is the carrier-free version of <u>ab53444</u>.

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

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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 production

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For more information see here.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: 100% PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number FA-11 lsotype lgG2a

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab237968 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
Flow Cyt (Intra)		1/100. Membrane permeabilisation is required for this application. ab18450 - Rat monoclonal lgG2a, is suitable for use as an isotype control with this antibody.
ICC/IF		1/50.

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 organspecific 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.

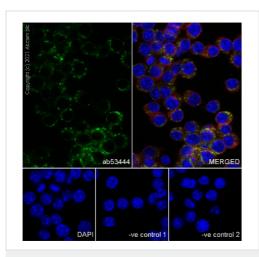
Sequence similarities Belongs to the LAMP family.

Post-translational N- and O-glycosylated.

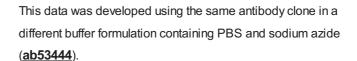
modifications

Cellular localization Cell membrane and Endosome membrane. Lysosome membrane.

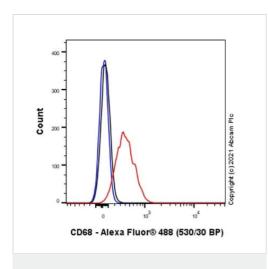
Images



Immunocytochemistry/ Immunofluorescence - Anti-CD68 antibody [FA-11] - BSA and Azide free (ab237968)



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] - BSA and Azide free (ab237968) This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (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 μ g) (Red) compared to Rat monoclonal lgG - Isotype Control (Black) and cells without incubation with primary antibody and secondary antibody (Blue). Goat F(ab)2 Anti-Rat lgG Fc (Alexa Fluor® 488, **ab150161**) at 1/2000 dilution was used as the secondary antibody.

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