## Datasheet: MCA1957FA

**Description:** RAT ANTI MOUSE CD68:FITC  

**Specificity:** CD68  

**Other names:** MACROSIALIN  

**Format:** FITC  

**Product Type:** Monoclonal Antibody  

**Clone:** FA-11  

**Isotype:** IgG2a  

**Quantity:** 50 µg

### Product Details

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry(1)</td>
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Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code BUF09) for this purpose.** The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (Product Code BUF041).

**Target Species** Mouse  

**Product Form** Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid  

**Preparation** Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant  

**Buffer Solution** Phosphate buffered saline  

**Preservative Stabilisers** 0.09% Sodium Azide  

1% Bovine Serum Albumin  

**Approx. Protein Concentrations** IgG concentration 0.1mg/ml  

**Immunogen** Purified Concanavalin A acceptor glycoprotein from P815 cell line.

**External Database** UniProt:
Rat anti mouse CD68 antibody, clone FA-11 recognizes mouse macrosialin, a heavily glycosylated transmembrane protein and murine homolog of human CD68, which is classified as a unique scavenger receptor (ScR) family member, due to the presence of a lysosome associated membrane protein (LAMP)-like domain.

CD68 is considered a pan macrophage marker, predominantly expressed on the intracellular lysosomes of tissue macrophages/monocytes, including Kupffer cells, microglia, histiocytes and osteoclasts, and is expressed to a lesser extent by dendritic cells and peripheral blood granulocytes.

CD68 is expressed by many tumor types including some B cell lymphomas, blastic NK lymphomas, melanomas, granulocytic (myeloid) sarcomas, hairy cell leukemias, and renal, urinary and pancreatic tumors, and can be used in cancer studies to demonstrate the presence/localization of macrophages.

Rat anti mouse CD68 antibody, clone FA-11, has been used in many mouse models for the identification of CD68 in immunohistochemical studies, using both frozen and paraffin-embedded tissues (Masaki et al. 2003) and Devey et al. 2009).

Rat anti mouse CD68 antibody, clone FA-11 can be used in flow cytometry to detect intracellular CD68, following permeabilization, and can detect surface macrosialin at low levels in resident mouse peritoneal macrophages which can be enhanced with thioglycollate stimulation.

Flow Cytometry

Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul. Recommended protocols are available [Here](#).

References

4. Schleicher, U. et al. (2005) Minute numbers of contaminant CD8+ T cells or CD11b+CD11c+ NK cells are the source of IFN-γ(gamma) in IL-12/IL-18-stimulated mouse macrophage populations. Blood 105: 1319-1328.

**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be...
protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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<thead>
<tr>
<th>Shelf Life</th>
<th>18 months from date of despatch.</th>
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<tbody>
<tr>
<td>Regulatory</td>
<td>For research purposes only</td>
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**Related Products**

**Recommended Useful Reagents**

- MOUSE SERO BLOCK FcR (BUF041A)
- MOUSE SERO BLOCK FcR (BUF041B)
- LEUCOPERM™ (BUF09)