

## Datasheet: MCA1957A488T

|                      |                                      |
|----------------------|--------------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD68:Alexa Fluor® 488 |
| <b>Specificity:</b>  | CD68                                 |
| <b>Other names:</b>  | MACROSIALIN                          |
| <b>Format:</b>       | ALEXA FLUOR® 488                     |
| <b>Product Type:</b> | Monoclonal Antibody                  |
| <b>Clone:</b>        | FA-11                                |
| <b>Isotype:</b>      | IgG2a                                |
| <b>Quantity:</b>     | 25 TESTS/0.25ml                      |

### 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).

|                    | Yes | No | Not Determined | Suggested Dilution |
|--------------------|-----|----|----------------|--------------------|
| Flow Cytometry (1) | ▪   |    |                | Neat - 1/10        |

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](#)).**

|                        |   |                            |                          |
|------------------------|---|----------------------------|--------------------------|
| <b>Target Species</b>  | Mouse   |                            |                          |
| <b>Product Form</b>    | Purified IgG conjugated to Alexa Fluor® 488 - liquid  |                            |                          |
| <b>Max Ex/Em</b>       | <b>Fluorophore</b>  | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                        | Alexa Fluor®488   | 495                        | 519                      |
| <b>Preparation</b>     | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |                            |                          |
| <b>Buffer Solution</b> | Phosphate buffered saline   |                            |                          |

|                                       |   |
|---------------------------------------|---|
| <b>Preservative</b>                   | 0.09% Sodium Azide  |
| <b>Stabilisers</b>                    | 1% Bovine Serum Albumin   |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05 mg/ml  |
| <b>Immunogen</b>                      | Purified Concanavalin A acceptor glycoprotein from P815 cell line.  |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">P31996</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">12514</a> Cd68    <a href="#">Related reagents</a></p>   |
| <b>RRID</b>                           | AB_1102282  |
| <b>Specificity</b>                    | <p><b>Rat anti Mouse CD68 antibody, clone FA-11</b> 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.</p> <p>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.</p> <p>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.</p> <p>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 (<a href="#">Masaki et al. 2003</a>) and (<a href="#">Devey et al. 2009</a>).</p> <p>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.</p> |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul. Recommended protocols are available <a href="#">Here</a>   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>Ramprasad, M.P. <i>et al.</i> (1996) Cell surface expression of mouse macrosialin and human CD68 and their role as macrophage receptors for oxidized low density lipoprotein. <a href="#">Proc Natl Acad Sci U S A. 93 (25): 14833-8.</a></li> <li>Rabinowitz, S.S. &amp; Gordon, S. (1991) Macrosialin, a macrophage-restricted membrane</li> </ol>   |

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

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