Datasheet: MCA1957

Description:	RAT ANTI MOUSE CD68
Specificity:	CD68
Other names:	MACROSIALIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	FA-11
Isotype:	IgG2a
Quantity:	0.25 mg

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (2)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (3)	▪			
Immunofluorescence	▪			

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.**

(2)**This product may require antigen retrieval using heat treatment prior to staining of paraffin sections. Either sodium citrate buffer or Tris/EDTA buffer may be used for this purpose (Martin-Manso *et al.* 2008). Staining has also been achieved without antigen retrieval (Lu *et al.* 2010).**

(3) **Non-reducing conditions recommended.**

Target Species	Mouse
Product Form	Purified IgG - 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 (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified Concanavalin A acceptor glycoprotein from P815 cell line.
External Database Links	**UniProt:** P31996 Related reagents **Entrez Gene:** 12514 Cd68 Related reagents
RRID	AB_322219
Specificity	**Rat anti Mouse CD68 antibody, clone FA-11** recognizes mouse macrosialin, a heavily glycosylated transmembrane protein and murine homolog of human CD68, 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 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 assays, 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 10µl of the suggested working dilution to label 10^6 cells in 100µl

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Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
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