

## Datasheet: MCA275FA BATCH NUMBER 0914

Description:	MOUSE ANTI RAT CD11b:FITC		
Specificity:	CD11b		
Other names:	INTEGRIN ALPHA M CHAIN, MAC-1		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	OX-42		
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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes No	Not Determi	ned Suggested Dilution			
	Flow Cytometry	-					
	necessarily exclude its	s use in such proc mmended that the	edures. Suggested e user titrates the ar	ular technique this does not working dilutions are given as htibody for use in their own			
Target Species	Rat						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid.						
Max Ex/Em	Fluorophore	Excitation Max (	m) Emission Max	(nm)			
	FITC	490	525				
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	IgG concentration 0.1 mg/ml						

### Concentrations

Immunogen	Resident rat peritoneal macrophages.				
RRID	AB_2129486				
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.				
Specificity	<b>Mouse anti Rat CD11b, clone OX-42,</b> recognizes rat CD11b, also known as <u>integrin</u> alpha-M, the receptor for the iC3b component of complement. CD11b is a 1151 amino acid single pass type 1 transmembrane glycoprotein posessing a single <u>vWFA</u> domain and multiple <u>FG-GAP</u> repeats. CD11b is expressed on most macrophages, including resident and activated peritoneal macrophages and Kupffer cells and around 35% of alveolar macrophages. The antibody also labels dendritic cells, granulocytes and <u>microglia</u> in the brain ( <u>Robinson <i>et al.</i>1986</u> ).				
	Mouse anti Rat CD11b, clone OX-42 is reported to inhibit complement mediated rosettes ( <u>Robinson <i>et al</i>.1986</u> ) as well as inhibit myelin binding and uptake ( <u>van der Laan <i>et</i></u> <u><i>al</i>.1996</u> ).				
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.				
References	<ol> <li>Robinson, A.P. <i>et al.</i> (1986) Macrophage heterogeneity in the rat as delineated by two monoclonal antibodies MRC OX-41 and MRC OX-42, the latter recognizing complement receptor type 3. Immunology. 57 (2): 239-47.</li> <li>Barclay, A.N. (1981) The localization of population of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42: 593-600.</li> <li>Milligan, C.E. <i>et al.</i> (1991) Differential immunochemical markers reveal the normal distribution of brain macrophages and microglia in the developing rat brain. J Comp Neurol. 314 (1): 125-35.</li> <li>Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 43 (3): 313-20.</li> <li>Zilka, N. <i>et al.</i> (2009) Human misfolded truncated tau protein promotes activation of microglia and leukocyte infiltration in the transgenic rat model of tauopathy. J Neuroimmunol. 209 (1-2): 16-25.</li> <li>Shokouhi, B.N. <i>et al.</i> (2010) Microglial responses around intrinsic CNS neurons are correlated with axonal regeneration. <u>BMC Neurosci. 11: 13.</u></li> <li>Calvo, M. <i>et al.</i> (2009) Capnellene, a natural marine compound derived from soft coral, attenuates chronic constriction injury-induced neuropathic pain in rats <u>Br J Pharmacol. 158: 713-25.</u></li> <li>Morales-Garcia, J.A. <i>et al.</i> (2011) Phosphodiesterase 7 inhibition preserves dopaminergic neurons in cellular and rodent models of Parkinson disease. <u>PLoS One.</u></li> </ol>				

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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA275FA 10041
Regulatory	For research purposes only

## **Related Products**

### **Recommended Negative Controls**

### MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA1210F)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M367428:200529'

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