

## Datasheet: MCA275A488 BATCH NUMBER 0512

Description:	MOUSE ANTI RAT CD11b:Alexa Fluor® 488
Specificity:	CD11b
Other names:	INTEGRIN ALPHA M CHAIN, MAC-1
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	OX-42
lsotype:	lgG2a
Quantity:	100 TESTS/1ml

## **Product Details**

Applications	This product has been r derived from testing with communications from th information. For general rad-antibodies.com/prote	hin our laborato e originators. F protocol recor	ories, peer-r Please refer	eviewed public to references	cations or personal indicated for further	
		Yes N	o No	ot Determined	Suggested Dilution	
	Flow Cytometry	-			Neat - 1/10	
	Where this antibody has necessarily exclude its u a guide only. It is recom system using appropriat	use in such pro mended that th	cedures. Si ie user titra	uggested work tes the antiboo	king dilutions are given as	
Target Species	Rat					
Product Form	Purified IgG conjugated	to Alexa Fluor	® 488 - liqu	iid		
Max Ex/Em	Fluorophore	Excitation Max	(nm) Emis	sion Max (nm)		
	Alexa Fluor®488	495		519		
Preparation	Purified IgG prepared by supernatant.	y affinity chrom	atography	on protein G fr	om tissue culture	
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Al	bumin				
Approx. Protein	IgG concentration 0.05	mg/ml				

## Concentrations

Immunogen	Resident rat peritoneal macrophages.
RRID	AB_324754
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. <u>Immunology, 57 (2): 239-47.</u></li> <li>Barclay, A.N. (1981) The localization of population of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <u>Immunology, 42: 593-600.</u></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. <u>J Comp Neurol, 314 (1): 125-35.</u></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. <u>J Histochem Cytochem, 43 (3): 313-20.</u></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. <u>J Neuroimmunol. 209 (1-2): 16-25.</u></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> 6(2):e17240.</li> </ol>

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 Lavisse, S. *et al.* (2012) Reactive astrocytes overexpress TSPO and are detected by TSPO positron emission tomography imaging. J Neurosci. 32: 10809-18.

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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 protected from light.	be
	Avoid repeated freezing and thawing as this may denature the antibody. Should this	s
	product contain a precipitate we recommend microcentrifugation before use.	0
Guarantee	12 months from date of despatch	
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