

## Datasheet: MCA275G

<b>Description:</b>	MOUSE ANTI RAT CD11b
<b>Specificity:</b>	CD11b
<b>Other names:</b>	INTEGRIN ALPHA M CHAIN, MAC-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-42
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	1 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](http://www.bio-rad-antibodies.com/protocols).

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

Where this antibody 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 antibody for use in their own system using appropriate negative /positive controls.

(1)**OX-42 is reported to be suitable for paraffin-embedded sections following PLP fixation ([Whiteland et al., 1995](#)).**

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Resident rat peritoneal macrophages.
<b>RRID</b>	AB_321301
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD11b, clone OX-42</b> recognizes rat CD11b, also known as <a href="#">integrin alpha-M</a>, the receptor for the iC3b component of complement. CD11b is a 1151 amino acid single pass type 1 transmembrane glycoprotein possessing a single <a href="#">vWFA</a> domain and multiple <a href="#">FG-GAP</a> 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 <a href="#">microglia</a> in the brain (<a href="#">Robinson et al.1986</a>).</p> <p>Mouse anti Rat CD11b, clone OX-42 is reported to inhibit complement mediated rosettes (<a href="#">Robinson et al.1986</a>) as well as inhibit myelin binding and uptake (<a href="#">van der Laan et al.1996</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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. <a href="#">Immunology. 57 (2): 239-47.</a></li> <li>2. 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. <a href="#">J Comp Neurol. 314 (1): 125-35.</a></li> <li>3. Yrjanheikki, J. <i>et al.</i> (1999) A tetracycline derivative, minocycline, reduces inflammation and protects against focal cerebral ischemia with a wide therapeutic window. <a href="#">Proc Natl Acad Sci U S A. 96: 13496-500.</a></li> <li>4. Draskovic-Pavlovic, B. <i>et al.</i> (1999) Differential effects of anti-rat CD11b monoclonal antibodies on granulocyte adhesiveness. <a href="#">Immunology. 96: 83-9.</a></li> <li>5. Kielian, T. and Hickey, W.F. (2000) Proinflammatory cytokine, chemokine, and cellular adhesion molecule expression during the acute phase of experimental brain abscess development. <a href="#">Am J Pathol. 157: 647-58.</a></li> <li>6. Choi, S.H. <i>et al.</i> (2003) Thrombin-induced microglial activation produces degeneration of nigral dopaminergic neurons <i>in vivo</i>. <a href="#">J Neurosci. 23: 5877-86.</a></li> <li>7. Bruce-Keller, A.J. <i>et al.</i> (2003) Synaptic transport of human immunodeficiency virus-Tat protein causes neurotoxicity and gliosis in rat brain. <a href="#">J Neurosci. 23: 8417-22.</a></li> <li>8. Jin, S.X. <i>et al.</i> (2003) p38 mitogen-activated protein kinase is activated after a spinal</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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee**

12 months from date of despatch

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**Health And Safety**

Material Safety Datasheet documentation #10040 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA275G10040>

**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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