

## Datasheet: MCA74F

<b>Description:</b>	RAT ANTI MOUSE CD11b:FITC
<b>Specificity:</b>	CD11b
<b>Other names:</b>	INTEGRIN ALPHA M CHAIN, MAC-1
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	M1/70.15
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.1 mg

## Product Details

**RRID** AB\_321295

**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	■			Neat - 1/10

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.

**Target Species** Mouse

**Species Cross Reactivity** Reacts with: Human, Rabbit  
**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form** Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

**Preparation** Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.09% Sodium Azide  
1% Bovine Serum Albumin

**Approx. Protein Concentrations** IgG concentration 0.1 mg/ml

**Immunogen** T cell enriched splenocytes from B10 mice.

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P05555</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">16409</a> Itgam <a href="#">Related reagents</a>
<b>Fusion Partners</b>	Spleen cells from immunised DA rats were fused with cells of the NS1/1.Ag4.1 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD11b antibody, clone M1/70.15</b> recognizes the murine CD11b cell surface antigen also known as the alpha M integrin chain or MAC-1, a differentiation antigen expressed by granulocytes, monocytes, NK cells and tissue macrophages.</p> <p>The expression of CD11b increases during monocyte maturation and expression levels vary on tissue macrophages. Peritoneal macrophages are reported to express higher levels of CD11b than splenic macrophages.</p> <p>Rat anti Mouse CD11b antibody, clone M1/70.15 has been reported to block iC3b binding to its receptor (<a href="#">Beller <i>et al.</i> 1982</a>).</p> <p>Rat anti Mouse CD11b antibody, clone M1/70.15 has been reported to as being suitable for use on PLP fixed paraffin embedded tissue but has not been tested for use on formalin fixed tissue (<a href="#">Whiteland <i>et al.</i> 1995</a>).</p> <p>This product is routinely tested in flow cytometry on mouse peritoneal macrophages.</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically via the Fc region to cells expressing low affinity Fc receptors. Non-specific FcR binding may be reduced by using <a href="#">SeroBlock FcR</a> reagent.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Beller, D.I. <i>et al.</i> (1982) Anti-Mac-1 selectively inhibits the mouse and human type three complement receptor. <a href="#">J Exp Med. 156 (4): 1000-9.</a></li> <li>2. Fernández-Suárez,D. (2014) The monoacylglycerol lipase inhibitor JZL184 is neuroprotective and alters glial cell phenotype in the chronic MPTP mouse model <a href="#">Neurobiol Aging. 35: 2603-16.</a></li> <li>3. Welt, F.G. <i>et al.</i> (2000) Neutrophil, not macrophage, infiltration precedes neointimal thickening in balloon-injured arteries. <a href="#">Arterioscler Thromb Vasc Biol. 20 (12): 2553-8.</a></li> <li>4. Terrando, N. <i>et al.</i> (2010) The impact of IL-1 modulation on the development of lipopolysaccharide-induced cognitive dysfunction. <a href="#">Crit Care. 14 (3): R88.</a></li> <li>5. Redensek, A. <i>et al.</i> (2011) Expression and detrimental role of hematopoietic prostaglandin D synthase in spinal cord contusion injury. <a href="#">Glia. 59: 603-14.</a></li> <li>6. Brochard, V. <i>et al</i> (2009) Infiltration of CD4+ lymphocytes into the brain contributes to neurodegeneration in a mouse model of Parkinson disease. <a href="#">J Clin Invest. 119: 182-92.</a></li> <li>7. Chinnery, H.R. <i>et al.</i> (2010) Novel characterization of monocyte-derived cell populations in the meninges and choroid plexus and their rates of replenishment in bone marrow chimeric mice. <a href="#">J Neuropathol Exp Neurol. 69: 896-909.</a></li> <li>8. Ferger, A.I. <i>et al</i> (2010) Effects of mitochondrial dysfunction on the immunological properties of microglia. <a href="#">J Neuroinflammation. 7: 45.</a></li> <li>9. Gales, A. <i>et al</i> (2010) PPARgamma controls dectin-1 expression required for host antifungal defense against <i>Candida albicans</i>. <a href="#">PLoS Pathog. 6 : e1000714.</a></li> </ol>

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**

For research purposes only

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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