

Datasheet: MCA74EL

Description:	RAT ANTI MOUSE CD11b:Low Endotoxin
Specificity:	CD11b
Other names:	INTEGRIN ALPHA M CHAIN, MAC-1
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	M1/70.15
Isotype:	IgG2b
Quantity:	0.5 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	■			1/50 - 1/100
Immunohistology - Frozen	■			
Immunohistology - Paraffin (1)	■			
ELISA			■	
Immunoprecipitation	■			
Western Blotting			■	
Immunofluorescence	■			
Functional Assays	■			

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)PLP fixation is recommended for optimal results, see [Whiteland et al.](#) for details

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes

Endotoxin Level	<0.01EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	T cell enriched splenocytes from B10 mice.
External Database Links	UniProt: P05555 Related reagents Entrez Gene: 16409 Itgam Related reagents
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the NS1/1.Ag4.1 mouse myeloma cell line.
Specificity	Rat anti Mouse CD11b antibody, clone M1/70.15 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. 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. Rat anti Mouse CD11b antibody, clone M1/70.15 has been reported to block iC3b binding to its receptor (Beller <i>et al.</i> 1982). 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 (Whiteland <i>et al.</i> 1995). This product is routinely tested in flow cytometry on mouse peritoneal macrophages.
References	1. Beller, D.I. <i>et al.</i> (1982) Anti-Mac-1 selectively inhibits the mouse and human type three complement receptor. J Exp Med. 156 (4): 1000-9. 2. Fernández-Suárez,D. (2014) The monoacylglycerol lipase inhibitor JZL184 is neuroprotective and alters glial cell phenotype in the chronic MPTP mouse model Neurobiol Aging. 35: 2603-16. 3. Welt, F.G. <i>et al.</i> (2000) Neutrophil, not macrophage, infiltration precedes neointimal thickening in balloon-injured arteries. Arterioscler Thromb Vasc Biol. 20 (12): 2553-8. 4. Terrando, N. <i>et al.</i> (2010) The impact of IL-1 modulation on the development of lipopolysaccharide-induced cognitive dysfunction. Crit Care. 14 (3): R88. 5. Redensek, A. <i>et al.</i> (2011) Expression and detrimental role of hematopoietic prostaglandin D synthase in spinal cord contusion injury. Glia. 59: 603-14. 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. J Clin Invest. 119: 182-92. 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. J Neuropathol Exp Neurol. 69: 896-909. 8. Ferger, A.I. <i>et al</i> (2010) Effects of mitochondrial dysfunction on the immunological properties of microglia. J Neuroinflammation. 7: 45. 9. Gales, A. <i>et al</i> (2010) PPARgamma controls dectin-1 expression required for host antifungal defense against Candida albicans. PLoS Pathog. 6 : e1000714.

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Storage

Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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