

## Datasheet: MCA342F

**BATCH NUMBER 162984**

<b>Description:</b>	MOUSE ANTI RAT CD163:FITC
<b>Specificity:</b>	CD163
<b>Other names:</b>	ED2
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ED2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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	▪			
Immunofluorescence	▪			1/10 - 1/100

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.

<b>Target Species</b>	Rat		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<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</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		

<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Rat spleen cell homogenate.
<b>RRID</b>	AB_321967
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the SP2/0-Ag 14 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD163, clone ED2</b> recognizes the rat ED2 cell surface glycoprotein (<a href="#">Dijkstra et al. 1985</a>). A 175 kDa molecule also known as rat CD163, a member of the group B scavenger receptor cysteine-rich (SRCR) family and an erythroblast adhesion receptor (<a href="#">Fabriek et al. 2007</a>).</p> <p>Mouse anti rat CD163, clone ED2 was shown to detect approximately 50% of peritoneal macrophages, a subset of splenic macrophages, and most tissue macrophages. However, no staining was observed in monocytes or alveolar macrophages (<a href="#">Dijkstra et al. 1985</a>, <a href="#">Beelen et al. 1987</a>). In freshly isolated bone marrow, expression of CD163 was limited to mature macrophages only (<a href="#">Barbe et al. 1990</a>).</p> <p>Clone ED2 may be used in immunohistology using antigen retrieval, and has also been described reacting with paraffin-embedded material following PLP fixation (Periodate-lysine-paraformaldehyde), see <a href="#">Whiteland et al.</a></p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. Barbe, E. <i>et al.</i> (1990) Characterization and expression of the antigen present on resident rat macrophages recognized by monoclonal antibody ED2. <a href="#">Immunobiol. 182: 88-99.</a></li> <li>2. Dijkstra, C.D. &amp; Damoiseaux, J.G. (1993) Macrophage heterogeneity established by immunocytochemistry. <a href="#">Prog Histochem Cytochem. 27 (2): 1-65.</a></li> <li>3. 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. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>4. Muller, D.N. <i>et al.</i> (2002) Immunosuppressive treatment protects against angiotensin II-induced renal damage. <a href="#">Am J Pathol. 161: 1679-93.</a></li> <li>5. Polfliet, M.M.J. <i>et al.</i> (2002) Identification of the rat mature macrophage antigen ED2 as CD163: Regulation by glucocorticoids and role in the production of proinflammatory mediators. PhD Thesis. Vrije University, Amsterdam.</li> <li>6. Banerjee, S. <i>et al.</i> (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. <a href="#">Br J Ophthalmol. 87: 1515-22.</a></li> <li>7. Moghaddami, M. <i>et al.</i> (2005) MHC class II compartment, endocytosis and phagocytic activity of macrophages and putative dendritic cells isolated from normal tissues rich in synovium. <a href="#">Int Immunol. 17: 1117-30.</a></li> <li>8. Ghiringhelli, F. <i>et al.</i> (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. <a href="#">J Exp Med. 202: 919-29.</a></li> </ol>

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<b>Storage</b>	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.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA342F">https://www.bio-rad-antibodies.com/SDS/MCA342F</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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Printed on 09 Jun 2026