

## Datasheet: MCA342R

**BATCH NUMBER 158552**

<b>Description:</b>	MOUSE ANTI RAT CD163
<b>Specificity:</b>	CD163
<b>Other names:</b>	ED2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ED2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.25 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	▪			
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) This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase**

<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 0.5 mg/ml
<b>Immunogen</b>	Rat spleen cell homogenate.
<b>RRID</b>	AB_321966
<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>Histology Positive Control Tissue</b>	Liver
<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</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 Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA342R>  
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**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- 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](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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