

## Datasheet: MCA341PE

**BATCH NUMBER 154486**

<b>Description:</b>	MOUSE ANTI RAT CD68:RPE
<b>Specificity:</b>	CD68
<b>Other names:</b>	ED1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ED1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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)	▪			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 control.

**(1) Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

#### Target Species

Rat

#### Species Cross Reactivity

Reacts with: Bovine

Does not react with: Horse

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

#### Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute with 1 ml distilled water

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)

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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
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<b>Immunogen</b>	Rat spleen cells
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q4FZY1</a> <a href="#">Related reagents</a>
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<b>RRID</b>	AB_324585
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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0-Ag14 mouse myeloma cell line.
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<b>Specificity</b>	<p><b>Mouse anti rat CD68, clone ED1</b> recognizes the rat ED1 antigen, a heavily glycosylated protein of ~90 -110 KDa, also known as rat CD68 (<a href="#">Dijkstra et al. 1985</a>).</p> <p>The ED1 antigen is expressed on most macrophages populations, as well as on monocytes and is considered as a pan-macrophage marker in the rat (<a href="#">Damoiseaux et al. 1994</a>). ED1 is expressed predominantly on the lysosomal membrane and lightly on the cell surface (<a href="#">Dijkstra et al. 1985</a>).</p> <p>The expression of ED1 antigen being predominantly cytoplasmic (<a href="#">Dijkstra et al. 1985</a>), flow cytometry results are improved by the use of a membrane permeabilization procedure, such as <a href="#">Leucoperm</a>, prior to staining.</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Damoiseaux, J.G. <i>et al.</i> (1994) Rat macrophage lysosomal membrane antigen recognized by monoclonal antibody ED1. <a href="#">Immunology. 83 (1): 140-7.</a></li><li>2. Bauer, J. <i>et al.</i> (1994) Phagocytic activity of macrophages and microglial cells during the course of acute and chronic relapsing experimental autoimmune encephalomyelitis. <a href="#">J Neurosci Res. 38 (4): 365-75.</a></li><li>3. Wu, L. <i>et al.</i> (2004) Dietary approach to attenuate oxidative stress, hypertension, and inflammation in the cardiovascular system. <a href="#">Proc Natl Acad Sci U S A. 101 (18): 7094-9.</a></li><li>4. Bao, F. <i>et al.</i> (2004) Early anti-inflammatory treatment reduces lipid peroxidation and protein nitration after spinal cord injury in rats. <a href="#">J Neurochem. 88 (6): 1335-44.</a></li><li>5. Zilka, N. <i>et al.</i> (2009) Human misfolded truncated tau protein promotes activation of microglia and leukocyte infiltration in the transgenic rat model of tauopathy. <a href="#">J Neuroimmunol. 209: 16-25.</a></li><li>6. Fujita, E. <i>et al.</i> (2010) Statin attenuates experimental anti-glomerular basement</li></ol>
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**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

This product should be stored undiluted.

DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA341PE>  
20487

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

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