**Datasheet: MCA341R**

**Description:** MOUSE ANTI RAT CD68

**Specificity:** CD68

**Other names:** ED1, MACROSIALIN

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** ED1

**Isotype:** IgG1

**Quantity:** 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).

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td></td>
<td></td>
<td></td>
<td>1/50 - 1/100</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunohistology - Paraffin (2)</td>
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<td>1/100</td>
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<td>ELISA</td>
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<td>Immunoprecipitation</td>
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<td>Western Blotting</td>
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<td>Immunofluorescence</td>
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<tr>
<td>Radioimmunoassays</td>
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</table>

Where this product 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 product for use in their own system using appropriate negative/positive controls.

1. **Membrane permeabilisation is required for this application.** Bio-Rad recommends the use of Leucoperm™ (Product Code **BUF09**) for this purpose.
2. **This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase**

### 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.

### Product Form

Purified IgG - liquid

### 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.

**Approx. Protein Concentrations**

IgG concentration 1.0 mg/ml

**Immunogen**

Rat spleen cells

**External Database Links**

UniProt: Q4FZY1 Related reagents

**Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0-Ag14 mouse myeloma cell line.

**Specificity**

**Mouse anti rat CD68, clone ED1** recognizes the rat ED1 antigen, a heavily glycosylated protein of 90-110 KDa, also known as rat CD68 ([Dijkstra et al. 1985](#)).

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 ([Damoiseaux et al. 1994](#)). ED1 is expressed predominantly on the lysosomal membrane and lightly on the cell surface ([Dijkstra et al. 1985](#)).

The expression of ED1 antigen being predominantly cytoplasmic ([Dijkstra et al. 1985](#)), flow cytometry results are improved by the use of a membrane permeabilization procedure, such as Leucoperm, prior to staining.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

**References**

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. 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 #10040 available at:

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

<table>
<thead>
<tr>
<th>Antibody</th>
<th>Fluo/Enzyme</th>
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</thead>
<tbody>
<tr>
<td>Goat Anti Mouse IgG (STAR77...)</td>
<td>HRP</td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR13...)</td>
<td>HRP</td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR8...)</td>
<td>DyLight®800</td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (STAR76...)</td>
<td>RPE</td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR12...)</td>
<td>RPE</td>
</tr>
<tr>
<td>Goat Anti Mouse IgG IgA IgM (STAR87...)</td>
<td>Alk. Phos., HRP</td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (H/L) (STAR117...)</td>
<td>Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP</td>
</tr>
</tbody>
</table>

Human Anti Mouse IgG1 (HCA036...) | HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC, HRP |

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA1209)