Datasheet: MCA2389B

<table>
<thead>
<tr>
<th>Description</th>
<th>RAT ANTI MOUSE Ly-6C:Biotin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity</td>
<td>Ly-6C</td>
</tr>
<tr>
<td>Format</td>
<td>Biotin</td>
</tr>
<tr>
<td>Product Type</td>
<td>Monoclonal Antibody</td>
</tr>
<tr>
<td>Clone</td>
<td>ER-MP20</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG2a</td>
</tr>
<tr>
<td>Quantity</td>
<td>0.1 mg</td>
</tr>
</tbody>
</table>

**Product Details**

| RRID                         | AB_844550                    |

**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>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Neat - 1/50</td>
</tr>
</tbody>
</table>

**Target Species**

Mouse

**Product Form**

Purified IgG conjugated to biotin - liquid

**Preparation**

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide
1% Bovine Serum Albumin

**Approx. Protein Concentrations**

IgG concentration 0.1 mg/ml

**Immunogen**

Balb/c macrophage precursor cell hybrids.

**External Database Links**

Uniprot: [P0CW03](http://www.uniprot.org/uniprot/P0CW03) Related reagents

**Fusion Partners**

Spleen cells from immunised rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.
Rat anti Mouse Ly-6C antibody, clone ER-MP20 recognizes murine Ly-6C, a 131 amino acid ~14 kDa differentiation antigen, expressed on macrophage/dendritic cell precursors in mid-stage development (late CFU-M, monoblasts and immature monocytes), granulocytes, and on a wide range of endothelial cells and subpopulations of B- and T-lymphocytes.

Rat anti Mouse Ly-6C antibody, clone ER-MP20 is able to distinguish multiple mouse blood monocyte subsets: immature Ly-6C<sup>hi</sup> monocytes are recruited to acute peripheral inflammation and develop into Ly-6C<sup>+</sup> exudate macrophages, whereas more mature Ly-6C<sup>-/lo</sup> monocytes are precursors for tissue macrophages and dendritic cells in steady state.

Rat anti Mouse Ly-6C, clone ER-MP20 can be used in conjunction with clone ER-MP12 in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (Leenen et al. 1990).

Rat anti Mouse Ly-6C was originally described as recognizing a protein encoded by the LY6C gene. It has subsequently become apparent that the LY6C locus demonstrates polymorphism and the LY6C gene has been re-designated LY6C2. The LY6C1 gene encodes a similar protein with ~95% sequence homology to LY6C2.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced through the use of the SeroBlock FcR reagent.

**References**

11. van Rijt, L.S. et al. (2002) Allergen-induced accumulation of airway dendritic cells is supported by an increase in CD31<sup>hi</sup>Ly-6C<sup>neg</sup> bone marrow precursors in a mouse model of asthma. *Blood.* 100: 3663-71.
17. Damya, L. et al. (2014) Purification of Tumor-Associated Macrophages (TAM) and Tumor-Associated Dendritic Cells (TADC) BIO-PROTOCOL. 4 (22) [Epub ahead of print].
### Storage
Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

### Guarantee
18 months from date of despatch.

### Health And Safety Information
Material Safety Datasheet documentation #10041 available at:

### Regulatory
For research purposes only