Datasheet: MCA2389PE

Description: RAT ANTI MOUSE Ly-6C:RPE
Specificity: Ly-6C
Format: RPE
Product Type: Monoclonal Antibody
Clone: ER-MP20
Isotype: IgG2a
Quantity: 100 TESTS

RRID AB_2234744

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
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<td>Neat - 1/5</td>
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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.

Target Species: Mouse

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

Reconstitution: Reconstitute with 1 ml distilled water

Max Ex/Em: RPE 488nm laser

<table>
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<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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<tr>
<td>RPE</td>
<td>496</td>
<td>578</td>
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</table>

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
5% Sucrose

Immunogen: Balb/c macrophage precursor cell hybrids.

External Database Links
UniProt: P0CW03
Related reagents
Spleen cells from immunised rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.

**Specificity**

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(hi)Ly-6C(neg) 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. DO NOT FREEZE.
This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

**Guarantee**

12 months from date of reconstitution.

**Health And Safety Information**

Material Safety Datasheet documentation #10075 available at:

**Regulatory**

For research purposes only

**Related Products**

**Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL: RPE (MCA1212PE)

**Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)