Datasheet: MCA2389PB

Description: RAT ANTI MOUSE Ly-6C:Pacific Blue®

Specificity: Ly-6C

Format: Pacific Blue®

Product Type: Monoclonal Antibody

Clone: ER-MP20

Isotype: IgG2a

Quantity: 100 TESTS/1ml

Product Details

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>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>-</td>
<td></td>
<td></td>
<td>Neat</td>
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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.

Target Species: Mouse

Product Form: Purified IgG conjugated to Pacific Blue® - liquid

Max Ex/Em

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Blue®</td>
<td>410</td>
<td>455</td>
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</tbody>
</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

Approx. Protein Concentrations: IgG concentration 0.05 mg/ml

Immunogen: Balb/c macrophage precursor cell hybrids.

External Database Links

UniProt: P0CW03

Related reagents

Fusion Partners: 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\(^{hi}\) monocytes are recruited to acute peripheral inflammation and develop into Ly-6C\(^{+}\) exudate macrophages, whereas more mature Ly-6C\(^{-/lo}\) 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\(^{6}\) 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 or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. This product is photosensitive and should be protected from light.
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

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

Regulatory
For research purposes only

Related Products
Recommended Negative Controls
RAT IgG2a NEGATIVE CONTROL: Pacific Blue® (MCA1212PB)

Recommended Useful Reagents
MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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