Datasheet: MCA2389A488T

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th>RAT ANTI MOUSE Ly-6C:Alexa Fluor® 488</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specificity:</strong></td>
<td>Ly-6C</td>
</tr>
<tr>
<td><strong>Format:</strong></td>
<td>ALEXA FLUOR® 488</td>
</tr>
<tr>
<td><strong>Product Type:</strong></td>
<td>Monoclonal Antibody</td>
</tr>
<tr>
<td><strong>Clone:</strong></td>
<td>ER-MP20</td>
</tr>
<tr>
<td><strong>Isotype:</strong></td>
<td>IgG2a</td>
</tr>
<tr>
<td><strong>Quantity:</strong></td>
<td>25 TESTS/0.25ml</td>
</tr>
</tbody>
</table>

**Product Details**

**RRID**

| **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.biorad-antibodies.com/protocols.  

<table>
<thead>
<tr>
<th>Suggested Dilution</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>Neat - 1/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Target Species</strong></th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Form</strong></td>
<td>Purified IgG conjugated to Alexa Fluor®488 - liquid</td>
</tr>
<tr>
<td><strong>Max Ex/Em</strong></td>
<td>Fluorophore</td>
</tr>
<tr>
<td>Alexa Fluor®488</td>
<td>495</td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td>Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant</td>
</tr>
<tr>
<td><strong>Buffer Solution</strong></td>
<td>Phosphate buffered saline</td>
</tr>
<tr>
<td><strong>Preservative Stabilisers</strong></td>
<td>0.09% Sodium Azide</td>
</tr>
<tr>
<td><strong>Approx. Protein Concentrations</strong></td>
<td>IgG concentration 0.05 mg/ml</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Balb/c macrophage precursor cell hybrids.</td>
</tr>
</tbody>
</table>

**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.


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**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 488 (MCA1212A488)

**Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)

MOUSE SEROBLOCK FcR (BUF041B)

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