# Anti-Mouse C5a Receptor (CD88) Monoclonal Antibody

<table>
<thead>
<tr>
<th>Catalogue#</th>
<th>Format</th>
<th>Size</th>
<th>Concentration</th>
<th>Isotype Control</th>
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</thead>
<tbody>
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<td>1.0 mg/ml</td>
<td>CLCR2B00</td>
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</table>

**Isotype:** Rat IgG<sub>2b</sub>

**DESCRIPTION:**

This monoclonal antibody detects the mouse C5a receptor (also known as CD88) found on peritoneal monocytes/macrophages, alveolar macrophages, neutrophils and peripheral blood myeloid cells. This clone (20/70) abrogated neutrophil recruitment in the mouse peritoneum *in vivo*, blocked binding of FITC rC5a to murine C5aR and inhibited migration of transfectants (C5aR-RBL-2H3) in response to rC5a. Metal-induced apoptosis in transfected NIH3T3 cells was reduced with this antibody. Ligands for C5aR include the RPS19 dimer and C5a/C5a des Arg. Mouse C5a receptor has seven transmembrane segments and shares ~65% homology with human.

Applications for this clone include flow cytometry, immunofluorescence and receptor blockage *in vitro* and *in vivo*. This antibody is not suitable for use in immunohistochemistry.

**PRESENTATION:**

**Purified:** Purified IgG buffered in PBS and 0.02% NaN<sub>3</sub>. (Purified from ascitic fluid via Protein G Chromatography). For maximum recovery of contents, spin down tube before use.

**Biotin, FITC and PE:** Biotin/FITC/PE conjugated IgG buffered in PBS, 0.02% NaN<sub>3</sub> and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

**LE:** No preservative added. filtered through 0.2µm filter.

**No Azide:** Purified Ig buffered in PBS, no preservative, 0.2µm sterile filtered.

**STORAGE/STABILITY:**

For all formats, store at 4°C. DO NOT FREEZE PE conjugates. For long term storage (Purified, Biotin, FITC, LE and No Azide), aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles.
**SPECIFICATIONS:**

**Clone:** 20/70

**Hybridoma Production:**

- **Immunization:**
  - **Immunogen:** RBL-2H3 (rat basophilic leukemia) transfected cells expressing murine C5aR on the cell surface
  - **Donor:** Lou/c rat spleen cells
  - **Fusion Partner:** Myeloma X63-Ag8.653

- **Specificity:** Mouse C5a Receptor (CD88)

- **Ig Class:** Rat IgG2b

- **Format:** FITC conjugated Ig buffered in PBS, 0.02% NaN₃ and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

**TEST RESULTS:**

**Tissue Distribution by Flow Cytometry Analysis:**

- **Mouse Strain:** C57BL/6
- **Cell Source:** Bone Marrow
- **Cell Concentration:** 1x10⁶ cells per test
- **Antibody Concentration Used:** 1 µg/10⁶ cells

![Log Fluorescence Intensity Count](chart1.png)

Balb/c peritoneal macrophages (left) or bone marrow (Gr-1 gate) (right) were stained with anti-C5a receptor (CD88) (clone: 20/70) (filled histogram) or mouse IgG2b isotype control (open histogram).

**N.B.** Appropriate control samples should always be included in any labeling studies.

* For optimal results in various applications, it is recommended that each investigator determine dilutions appropriate for individual use.
REFERENCES:


