Antibody Details:

<table>
<thead>
<tr>
<th>Catalogue#</th>
<th>Format</th>
<th>Size</th>
<th>Concentration</th>
<th>Isotype Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL004A</td>
<td>Ascites</td>
<td>0.5ml</td>
<td>N/A</td>
<td>CLCMG2A00</td>
</tr>
<tr>
<td>CL004AP/-2</td>
<td>Purified</td>
<td>250µg/500µg</td>
<td>1.0 mg/ml</td>
<td>CLCMG2A00</td>
</tr>
<tr>
<td>CL004AP-S</td>
<td>Purified</td>
<td>50µg</td>
<td>1.0 mg/ml</td>
<td>CLCMG2A00</td>
</tr>
<tr>
<td>CL004B/-5</td>
<td>Biotin</td>
<td>100µg/500µg</td>
<td>0.1 mg/ml</td>
<td>CLCMG2A15</td>
</tr>
<tr>
<td>CL004F/-5</td>
<td>FITC</td>
<td>100µg/500µg</td>
<td>0.1 mg/ml</td>
<td>CLCMG2A01</td>
</tr>
<tr>
<td>CL004NA</td>
<td>No Azide</td>
<td>1mg</td>
<td>1.0 mg/ml</td>
<td>CLCMG2A00</td>
</tr>
<tr>
<td>CL004PE/-4</td>
<td>PE</td>
<td>50µg/200µg</td>
<td>0.1 mg/ml</td>
<td>CLCMG2A04</td>
</tr>
<tr>
<td>CL004TC</td>
<td>PE-Cy5</td>
<td>100µg</td>
<td>0.1 mg/ml</td>
<td>CLCMG106</td>
</tr>
<tr>
<td>CL004AF4</td>
<td>Alexa Fluor®488</td>
<td>100µg</td>
<td>0.1 mg/ml</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Isotype Control:** Mouse IgG1

**DESCRIPTION:**

Cedarlane's anti-rat T cytotoxic/suppressor cell monoclonal antibody recognizes a determinant on the majority of thymocytes (90-95%), a subset of peripheral T cells, the majority of NK cells, and the granular intraepithelial leukocytes in the small intestine (1,2,3,4). The antigen recognized is a complex of surface glycoproteins of Mr 34, 39, and 76 kDa and is the rat homologue of the human CD8 and the mouse Ly 2.3 antigen (5,8). CL004 labels all peripheral T cells that are unlabeled by the CL003 (W3/25) monoclonal antibody. It labels a T cell subset which mediates the suppression of antibody formation (1) and the cytotoxic cell precursor (2). CL004 and CL003 can be used together to fractionate T cells by sorting in FACS or by rosette depletion (1,2) or can be used together to study subsets of T cells in the rat which mediate lethal graft versus host disease (7). This antibody is one of the 3 monoclonal antibodies which labels T lymphocyte populations in the rat, these being CL002AP (W3/13) which labels all T cells, as well as CL003 (W3/25) and CL004 (MRC OX-8) which label non-overlapping T cell populations. These monoclonal antibodies used in concert are being employed extensively to investigate cellular aspects of the immune response in rats and prove to be useful as markers for functionally distinct subpopulations of lymphocytes. This clone is reported to work with frozen and paraffin sections (9).

**PRESENTATION:**

**Ascites:** 0.5ml Lyophilized.

**Purified:** Purified IgG buffered in PBS and 0.02% NaN₃. (Purified from ascitic fluid via Protein G Chromatography). For maximum recovery of contents, spin down tube before use.

**Biotin, FITC, PE and AF488:** Biotin/FITC/PE/AF488 conjugated IgG buffered in PBS, 0.02% NaN₃ and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

Alexa Fluor® is a registered trademark of Life Technologies Corporation.
STORAGE/STABILITY:

Stable at 4°C. DO NOT FREEZE PE and AF488 conjugates. For long term storage, aliquot and freeze unused portions at -20°C in volumes appropriate for single usage. Avoid repeated freeze thaw cycles.

SPECIFICATIONS:

Clone: MRC OX-8
Hybridoma Production:
Immunization:
  Immunogen: High molecular weight rat thymocyte glycoproteins
  Donor: BALB/c spleen
  Fusion Partner: P3-NSI-1-Ag4 (NS1/1)
Specificity: Rat CD8a
Strain Distributions:
  Strains Tested: Wistar, Buffalo, Brown Norway, Fischer 344
  Positive: Wistar, Buffalo, Brown Norway, Fischer 344
  Negative: none

FLOW CYTOMETRIC ANALYSIS:
Rat Strain: Wistar
Cell Concentration: 1x10^6 cells per test
Antibody Concentration: 0.1 µg/10^6 cells

<table>
<thead>
<tr>
<th>Cell source</th>
<th>Percent staining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thymus</td>
<td>92.6%</td>
</tr>
<tr>
<td>Spleen</td>
<td>11.8%</td>
</tr>
<tr>
<td>Lymph Node</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

Wistar rat splenic T-cells (left) or thymocytes (right) were stained with anti-CD8a (clone: OX-8) (filled histogram) or mouse IgG1, κ isotype control (open histogram).

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

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

REFERENCES: