Rat Anti-Mouse Ly-6A/E

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Format</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1755-01</td>
<td>Purified (UNLB)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1755-02</td>
<td>Fluorescein (FITC)</td>
<td>0.5 mg</td>
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<tr>
<td>1755-08</td>
<td>Biotin (BIOT)</td>
<td>0.5 mg</td>
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<tr>
<td>1755-09</td>
<td>R-phycocerythrin (PE)</td>
<td>0.1 mg</td>
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<tr>
<td>1755-09L</td>
<td>R-phycocerythrin (PE)</td>
<td>0.2 mg</td>
</tr>
<tr>
<td>1755-11</td>
<td>Allophycocyanin (APC)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1755-13</td>
<td>Spectral Red® (SPRD)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1755-14</td>
<td>Low Endotoxin, Azide-Free (LE/AF)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1755-26</td>
<td>Pacific Blue™ (PACBLU)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1755-30</td>
<td>Alexa Fluor® 488 (AF488)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1755-31</td>
<td>Alexa Fluor® 647 (AF647)</td>
<td>0.1 mg</td>
</tr>
</tbody>
</table>

**Overview**

**Clone**  D7  
**Isotype**  Rat (Lewis) IgG2aκ  
**Immunogen**  IL-2 dependent mouse (C57BL/6) cytotoxic T cell line CTL-L  
**Specificity**  Mouse Ly-6A/E (Ly-6A.2 & Ly-6E.1); Mr 18 kDa  
**Alternate Name(s)**  Sca-1

**Description**

Ly-6A/E, also known as Sca-1, is a member of the Ly-6 multigene family of type V glycosphatidylinositol-anchored cell surface proteins. It is expressed on multipotent hematopoietic stem cells in bone marrow of mice with both the Ly-6.1 and Ly-6.2 allotypes. In the periphery, Ly-6A/E exhibits a pattern of expression which is based on differences between the two allotypes. Ly-6.1 strains (e.g., A, BALB/c, CBA, C3H/He, DBA/1, NZB) have few Ly-6A/E+ resting peripheral lymphocytes whereas Ly-6.2 strains (e.g., AKR, C57BL, C57BR, C57L, DBA/2, PL, SJL, SWR, 129) have relatively high numbers of Ly-6A/E+ lymphocytes. The expression of Ly-6A/E is dramatically upregulated in all strains upon cellular activation. Studies with the monoclonal antibody D7 suggest that Ly-6A/E may be involved in B and T lymphocyte responses and it appears that the antigen may be required for T-cell receptor-mediated T-cell activation.

**Applications**

- **FC** – Quality tested 1,3-7  
- **IHC-FS** – Reported in literature 3  
- **IHC-PS** – Reported in literature 2  
- **IP** – Reported in literature 1,3  
- **WB** – Reported in literature 1,3  
- **Costim** – Reported in literature 4

**Working Dilutions**

**Flow Cytometry**

- FITC, BIOT, and AF488 conjugates  
  ≤ 1 μg/10⁶ cells  
- PE, APC, SPRD, PACBLU, and AF647 conjugates  
  ≤ 0.2 μg/10⁶ cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL.

**Other Applications**

Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. **No preservatives or amine-containing buffer salts added.** Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN3. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN3. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C.
- The Spectral Red® is a PE/CY5 tandem conjugate.
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN3. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References