Rat Anti-Mouse CD40

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Format</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1645-01</td>
<td>Purified (UNLB)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1645-02</td>
<td>Fluorescein (FITC)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1645-08</td>
<td>Biotin (BIOT)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1645-09</td>
<td>R-phycoerythrin (PE)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1645-09L</td>
<td>R-phycoerythrin (PE)</td>
<td>0.2 mg</td>
</tr>
<tr>
<td>1645-11</td>
<td>Allophycocyanin (APC)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1645-13</td>
<td>Spectral Red® (SPRD)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1645-14</td>
<td>Low Endotoxin, Azide-Free (LE/AF)</td>
<td>0.5 mg</td>
</tr>
</tbody>
</table>

Overview

Clone: 1C10
Isotype: Rat (Lewis) IgG2aκ
Immunogen: sCD40
Specificity: Mouse CD40; Mr 45-50 kDa
Alternate Name(s): TNFRSF5, Bp50

Description

CD40 is a type I cell surface protein belonging to the tumor necrosis factor superfamily of cell surface receptors. In mice it is expressed on B lineage cells, follicular dendritic cells, thymic epithelium, and interdigitating cells in the T-cell zone of secondary lymphoid organs. CD40 first becomes detectable on a subset of small pre-B II cells in bone marrow with the levels of CD40 expression increasing thereafter during B cell maturation. Immature B cells (IgM⁺IgD⁻B220⁻) express intermediate levels of CD40, whereas mature B cells (IgM⁺IgD⁺B220⁺) express high levels. CD40 has a central role in B cell growth and differentiation, and signaling through CD40 in combination with IL-4 reportedly induces immunoglobulin isotype switching and secretion of IgE. The agonistic 1C10 antibody closely resembles gp39/CD40 ligand in its ability to stimulate proliferation of small, resting B lymphocytes in the absence of other cofactors.

Applications

FC – Quality tested ¹,⁷-¹²
IP – Reported in literature ¹
Activ – Reported in literature ¹,⁴
Block – Reported in literature ⁵,⁶

Working Dilutions

Flow Cytometry

- FITC and BIOT conjugates: ≤ 2 µg/10⁶ cells
- PE, APC, and SPRD conjugates: ≤ 0.5 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/NaNO₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaNO₃. 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/NaNO₃ 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/NaNO₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaNO₃ 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.**
- 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 (M)SDS.

References


Spectral Red® is a registered trademark of Southern Biotechnology Associates, Inc.
Spectral Red® is a PE/CY5 tandem conjugate.
Cy® is a registered trademark of GE Healthcare.