Mouse Anti-Chicken CD45

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Form</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8270-01</td>
<td>Purified (UNLB) Antibody</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>8270-02</td>
<td>Fluorescein (FITC) Conjugate</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>8270-08</td>
<td>Biotin (BIOT) Conjugate</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>8270-09</td>
<td>R-phycoerythrin (R-PE) Conjugate</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>8270-11</td>
<td>Allophycocyanin (APC) Conjugate</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>8270-13</td>
<td>**Spectral Red™ (SPRD) Conjugate</td>
<td>0.1 mg</td>
</tr>
</tbody>
</table>

DESCRIPTION

Clone LT40
Ig Isotype Mouse IgMκ
Specificity Chicken CD45 (Mr 190 to 215-kDa).

Chicken CD45 is a transmembrane glycoprotein expressed on all leukocytes. B lineage cells in the bursa of Fabricius express the 215 kDa isoform while T lineage cells bear the 190 kDa variant. These high molecular weight molecules have intrinsic phosphotyrosine phosphatase activity characteristic of mammalian CD45. Levels of CD45 expression detected by MAb LT40 in the avian thymus are heterogeneous with approximately 90% of thymocytes expressing fourfold higher levels of surface CD45 (CD45hi) than do the remaining 10% (CD45lo) of thymocytes. The CD45lo population contains exclusively thymocytes with the CD3-CD4+CD8lo phenotype characteristic of the immediate precursors to the CD3+CD4+CD8+ thymic population which are CD45hi. This shift from low to high levels of surface CD45 expression is concomitant with the transition from CD4+CD8lo to CD4+CD8hi and before the expression of CD3. The ability of MAb LT40 to discriminate this CD45lo subpopulation provides a suitable marker for the CD3-CD4+CD8lo immediate precursors to the CD3-CD4+CD8+ thymocytes.

RESEARCH APPLICATIONS

- Flow cytometry
- Immunoprecipitation
- Studies of avian T cell development

CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested by flow cytometry to conform to characteristics of a standard reference reagent.

WORKING DILUTIONS

Flow Cytometry:
- Fluorescein conjugate ≤ 1 μg/10⁶ cells
- Biotin conjugate ≤ 1 μg/10⁶ cells
- R-phycoerythrin conjugate ≤ 0.2 μg/10⁶ cells
- Allophycocyanin conjugate ≤ 0.2 μg/10⁶ cells
- Spectral Red™ conjugate ≤ 0.2 μg/10⁶ cells

Other Applications:
Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.
IMMUNOFLUORESCENT STAINING

Product: Mouse Anti-Chicken CD45-R-PE
Cat. No.: 8270-09
Amount Used: $0.3 \mu g/10^6$ cells

Chicken thymocytes were double-stained with R-PE-labeled mouse anti-chicken CD45 and mouse anti-chicken CD3-FITC. Small lymphocytes were then gated and analyzed on a FACScan™ flow cytometer (BDIS, San Jose, CA).

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/NaN$_3$. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN$_3$. Store at 2-8°C.
- The R-phycoerythrin (R-PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN$_3$ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red$^\text{TM}$ (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN$_3$ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect conjugated forms from light. Each reagent is stable for the period shown on the bottle label if stored as directed.

WARNING

Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

REFERENCES