Hamster Anti-Mouse CD103

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Format</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1810-01</td>
<td>Purified (UNLB)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1810-02</td>
<td>Fluorescein (FITC)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1810-08</td>
<td>Biotin (BIOT)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1810-09</td>
<td>R-phycoerythrin (PE)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1810-14</td>
<td>Low Endotoxin. Azide-Free (LE/AF)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1810-26</td>
<td>Pacific Blue™ (PACBLU)</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>1810-30</td>
<td>Alexa Fluor® 488 (AF488)</td>
<td>0.1 mg</td>
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<tr>
<td>1810-31</td>
<td>Alexa Fluor® 647 (AF647)</td>
<td>0.1 mg</td>
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</tbody>
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Overview

Clone 2E7
Isotype Hamster (Armenian) IgG2
Immunogen C57BL/6J mouse intestinal intraepithelial lymphocytes (IEL)
Specificity Mouse CD103; Mr 150 & 25 kDa
Alternate Name(s) Integrin αIEL, αE integrin, ITGAE

Description

CD103 is a member of the integrin series of adhesion molecules. This antigen defines a developmentally important subset of T cells, namely mucosal T cells including all IEL (intraepithelial lymphocytes) and ~20% of lamina propria T cells. Expression of CD103 is more restricted outside these mucosal organs appearing at lower levels on T cell subsets of the lymph node, dendritic epidermis, and periphery. In non-epithelial CD103+ T cells there is a bias toward expression on CD8+ cells. The 2E7 monoclonal antibody exhibits antigen immunoprecipitation patterns similar if not identical to the rat anti-mouse CD103 monoclonal antibody M290. 2E7 is reported to have signal-inducing activity in a redirected lysis assay and to costimulate IEL and CD8+ lymph node cells in conjunction with anti-TCR in vitro which runs counter to the usual inhibition of CTL by anti-integrins. This costimulatory activity is also shared by the monoclonal antibody M290. The property of costimulation is not unique to the mouse since the combination of anti-human αIEL plus anti-TCR will produce similar proliferation in human cells with the exception that CD8+ cells are not stimulated.

Applications

FC – Quality tested
IP – Reported in literature
IHC-FS – Reported in literature
Activ – Reported in literature

Working Dilutions

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

Flow Cytometry

FITC, BIOT, PACBLU, and AF488 conjugates ≤ 1 µg/10^6 cells
PE and AF647 conjugates ≤ 0.2 µg/10^6 cells

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-phycocerythrin (PE) 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.**
- 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/NaNO₃. 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


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