PE Rat Anti-Mouse CD103

Product Information
- Material Number: 561043
- Alternate Name: Integrin αIEL chain
- Size: 25 µg
- Concentration: 0.2 mg/ml
- Clone: M290
- Immunogen: Mouse mammary tumor cells
- Isotype: Rat (LOU) IgG2a, κ
- Reactivity: QC Testing: Mouse
- Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
The M290 antibody reacts with the α chain of αIELβ7 integrin. CD103 has a unique and fairly restricted tissue distribution. It is expressed on almost all intestinal intraepithelial lymphocytes (IEL), on dendritic epidermal T cells (DEC), on subpopulations of peripheral T cells, and on distinct subsets of fetal, neonatal, and adult thymocytes. E-cadherin is the epithelial-cell ligand for αIELβ7 integrin. The ordered expression of αIEL during thymocyte development (which occurs under the influence of the thymic epithelium), the high level of expression of αIEL on those peripheral T cells found in epithelial tissues (IEL and DEC), and the expression of CD103 on a subset of CD8+ lymphocytes responding to allogeneic epithelial cells suggest that αIELβ7 integrin may have a common role in the interactions of T lymphocytes with epithelia during T-cell maturation and effector functions. CD103 is thought to play a role in allograft rejection. The M290 antibody is reported to efficiently inhibit αIELβ7-mediated adhesion in vitro assays.

Preparation and Storage
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes
- Application: Flow cytometry Routinely Tested

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>553930</td>
<td>PE Rat IgG2a, κ Isotype Control</td>
<td>0.1 mg</td>
<td>R35-95</td>
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Product Notices
1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References
Hadley GA, Bartlett ST, Via CS, Rostapshova EA, Moainie S. The epithelial cell-specific integrin, CD103 (alpha E integrin), defines a novel subset of alloreactive CD8+ CTL. *J Immunol.* 1997; 159(6):748-756. (Biology)