

## Product datasheet for **AM08068BT-N**

### CD103 Hamster Monoclonal Antibody [Clone ID: 2E7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	2E7
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> Identification and enumeration of CD103 + cells ( $< / = 1 \mu\text{g}/10\text{e6 cells}$ ). (Ref.1)
Reactivity:	Mouse
Host:	Hamster
Isotype:	IgG
Clonality:	Monoclonal
Specificity:	<p>This antibody is specific to CD103/alpha IEL beta7 integrin complex (Mr. 160 and 115 kDa peptides).</p> <p>This antibody is reported to have signal inducing activity in a redirected lysis assay and to co stimulate 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. The property of costimulation is not unique to the mouse since the combination of anti human alpha IEL (intraepithelial lymphocytes) plus anti TCR will produce similar proliferation in human cells, with the exception that CD8+ cells are not stimulated. (Ref.5)</p>
Formulation:	<p>PBS containing 0.09% Sodium Azide as preservative.</p> <p>Label: Biotin</p> <p>State: Liquid purified Ig fraction.</p>
Concentration:	lot specific
Conjugation:	Biotin
Storage:	<p>Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer.</p> <p>This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing.</p>
Stability:	Shelf life: one year from despatch.
Gene Name:	integrin alpha E, epithelial-associated
Database Link:	<a href="#">Entrez Gene 16407 Mouse Q60677</a>



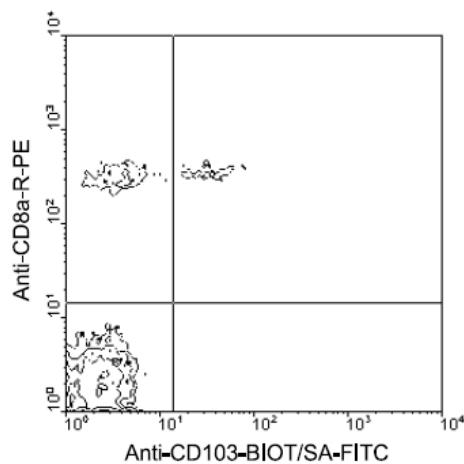
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**Background:**

CD103/Integrin alpha E is a new member of the integrin series of adhesion molecules containing the beta7 subunit. 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. (Ref.1-3) In non-epithelial CD103+ T cells there is a bias toward expression on CD8+ cells. Integrin alpha E is a heterodimer comprising a 150kDa alpha chain and a 120kDa beta chain. Integrin alpha E is expressed by approximately 1% of peripheral blood lymphocytes, activated T lymphocytes and by hairy cell leukaemia cells. The antigen is also expressed by intraepithelial lymphocytes.

**Synonyms:**

Integrin alpha-E, Integrin alpha-IEL, HML-1 antigen, ITGAE

**Product images:**

Immunofluorescent Staining: BALB/c mesenteric lymph node cells were first labeled with Hamster Anti-Mouse CD103-Biotin, and then double-stained with streptavidin-FITC and Rat Anti-Mouse CD8a-PE ([AM08023RP-N] or [AM08023RP-S]). Small lymphocytes were gated and