

## Monoclonal Antibody to CD103 - FITC

<b>Alternate names:</b>	HML-1 antigen, ITGAE, Integrin alpha-E, Integrin alpha-IEL, Mucosal lymphocyte 1 antigen
<b>Catalog No.:</b>	AM08068FC-N
<b>Quantity:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">Q60677</a>
<b>NCBI:</b>	<a href="#">10090</a>
<b>Host / Isotype:</b>	Hamster / IgG
<b>Clone:</b>	2E7
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Buffer System:</b> PBS containing 0.09% Sodium Azide as preservative. <b>Label:</b> FITC – Fluorescein Isothiocyanate Isomer 1
<b>Applications:</b>	<b>Flow Cytometry:</b> Identification and enumeration of CD103 + cells ( $< / = 1 \mu\text{g}/10\text{e}6$ cells). (Ref.1) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody is specific to CD103/alpha IEL beta7 integrin complex (Mr. 160 and 115 kDa peptides). 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) <b>Species:</b> Mouse. Other species not tested.

**Storage:** Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:**

1. LeFrancois, L., T.A. Bennett, W.L. Havran, and L. Puddington. 1994. Eur. J. Immunol. 24:635.
2. Lefrancois, L. 1991. Immunol. Today, 12(12):436.
3. Reimann, J. and Rudolphi, A. 1995. Eur. J. Immunol. 25:1580.
4. Roberts, K., and P. Kilshaw. 1993. Eur. J. Immunol. 23:1630.
5. Cerf-Bensussan, N., Bengue, B., Gagnon, J. and Meo, T. 1992. Eur. J. Immunol. 22:273.

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**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

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