

## APC Anti-Mouse CD103 Antibody[M290]

Catalog Number: E-AB-F1090UE

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Reactivity</b>	Mouse
<b>Host</b>	Rat
<b>Isotype</b>	Rat IgG2a, $\kappa$
<b>Clone No.</b>	M290
<b>Isotype Control</b>	APC Rat IgG2a, $\kappa$ Isotype Control[2A3] [Product E-AB-F09833E]
<b>Conjugation</b>	APC
<b>Conjugation Information</b>	APC is designed to be excited by the Red (627-640 nm) laser and detected using an optical filter centered near 660 nm (e.g., a 660/20 nm bandpass filter).
<b>Storage Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

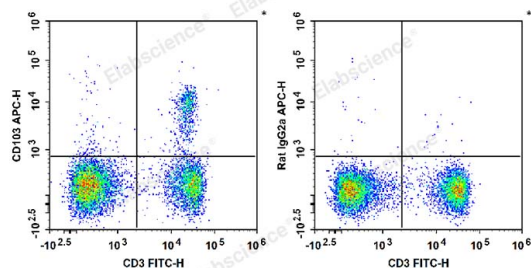
### Applications

### Recommended usage

#### FCM

Each lot of this antibody is quality control tested by flow cytometric analysis. Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use. We suggest each investigator should titrate the reagent to obtain optimal results [The recommended concentration is 0.1-1  $\mu\text{g}/10^6$  cells in 100  $\mu\text{L}$  volume].

### Data



C57BL/6 murine splenocytes are stained with FITC Anti-Mouse CD3 Antibody and APC Anti-Mouse CD103 Antibody (Left). Splenocytes are stained with FITC Anti-Mouse CD3 Antibody and APC Rat IgG2a,  $\kappa$  Isotype Control (Right).

### Preparation & Storage

<b>Storage</b>	Keep as concentrated solution. This product can be stored at 2-8°C for 12 months. Please protected from prolonged exposure to light and do not freeze.
<b>Shipping</b>	Ice bag

### Antigen Information

<b>Alternate Names</b>	CD103;Integrin alpha M290;Integrin alpha-E;Itgae
<b>Uniprot ID</b>	Q60677
<b>Gene ID</b>	16407

### For Research Use Only

## Background

CD103 is a type I transmembrane glycoprotein known as  $\alpha$ E integrin or Integrin  $\alpha$ IEL chain. It belongs to the integrin family and is primarily found on intestinal intraepithelial lymphocytes (IEL). CD103 is also expressed on a subpopulation of lamina propria T cells, epithelial dendritic cells, lamina propria-derived dendritic cells, and a small subset of peripheral lymphocytes. T regulatory cells express high level of CD103. The CD103 expression on lymphocytes can be induced upon activation and TGF- $\beta$  stimulation. In association with integrin  $\beta$ 7, CD103 is expressed as  $\alpha$ E/ $\beta$ 7 heterodimer. Mature CD103 protein can be cleaved into 2 chains, a 150 kD (C-terminal) chain and a 25 kD (N-terminal) chain, which remain linked by disulfide bonds. CD103 binds to E-cadherin and mediates homing of lymphocytes to the intestinal epithelium.