

## Elab Fluor® 647 Anti-Mouse CD103 Antibody[M290]

Catalog Number: E-AB-F1090UM

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

### Description

Reactivity	Mouse
Host	Rat
Isotype	Rat IgG2a, κ
Clone No.	M290
Isotype Control	Elab Fluor® 647 Rat IgG2a, κ Isotype Control[2A3] [Product E-AB-F09833M]
Conjugation	Elab Fluor® 647
Conjugation Information	Elab Fluor® 647 is designed to be excited by the Red laser (627-640 nm) and detected using an optical filter centered near 670 nm (e.g., a 660/20 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

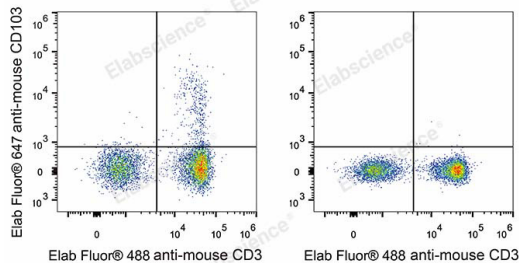
### Applications

### 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 µg/10<sup>6</sup> cells in 100 µL volume].

### Data



C57BL/6 murine splenocytes are stained with Elab Fluor® 647 Anti-Mouse CD103 Antibody and Elab Fluor® 488 Anti-Mouse CD3 Antibody (Left). Splenocytes stained with Elab Fluor® 488 Anti-Mouse CD3 Antibody (Right) are used as control.

### Preparation & Storage

Storage	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.
Shipping	Ice bag

### Antigen Information

Alternate Names	CD103;Integrin alpha M290;Integrin alpha-E;Itgae
Uniprot ID	Q60677
Gene ID	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.