

**PerCP/Cy5.5 anti-human CD103 (Integrin  $\alpha$ E)**

**Catalog # / Size:** 2351130 / 100 tests  
2351125 / 25 tests

**Clone:** Ber-ACT8

**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human

**Concentration:** Lot-specific

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: Western Blotting<sup>1</sup>, immunoprecipitation<sup>1</sup>, and immunohistochemical staining of frozen tissue sections<sup>1</sup>.

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**Description:** CD103 is a type I transmembrane glycoprotein also known as  $\alpha$ E integrin, integrin  $\alpha$ IEL chain, and human mucosal lymphocyte antigen 1. 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. Treg cells express high level of CD103. Hairy cell leukemia has also been shown to express CD103. The expression of CD103 on lymphocytes can be induced upon activation and TGF- $\beta$  stimulation. In association with integrin  $\beta$ 7, CD103 is expressed as an  $\alpha$ 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.