

PE/Dazzle™ 594 anti-mouse CD103

Catalog # / Size: 1207145 / 25 µg
1207150 / 100 µg

Clone: 2E7

Isotype: Hamster IgG

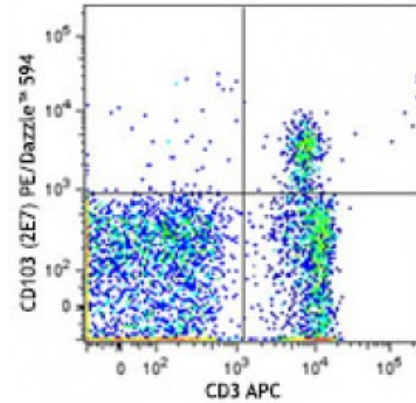
Immunogen: Mouse intestinal intraepithelial lymphocytes

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: Lot-specific

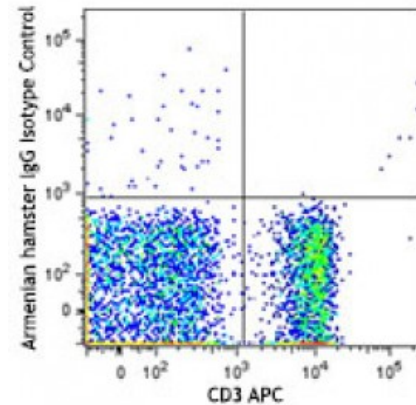


C57BL/6 mouse splenocytes were stained with CD3 APC and CD103 (clone 2E7) PE/Dazzle™ 594 (top), or Armenian hamster IgG PE/Dazzle™ 594 isotype control (bottom).

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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation¹, immunohistochemical staining^{1,7} of acetone-fixed frozen sections, immunofluorescence², and *in vitro* activation¹.

- Application References:**
1. LeFrancois L, *et al.*, 1994. *Eur. J. Immunol.* 24:635. (FC, IHC, IP)
 2. Mysorekar IU, *et al.*, 2002. *J. Biol. Chem.* 277:37811. (FC, IF)
 3. Mikami N, *et al.*, 2011. *J. Immunol.* 186:6886. [PubMed](#)
 4. del Rio ML, *et al.*, 2011. *Transpl. Int.* 24:501. (FC) [PubMed](#)
 5. Quinn KM, *et al.*, 2013. *J. Immunol.* 191:5085. [PubMed](#)
 6. Verhagen J and Wraith DC. 2014. *J. Immunol. Methods.* S0022. (FC) [PubMed](#)
 7. Xiao B, *et al.*, 2015. *PLoS One* 1:e0115333. (IHC)

Description: CD103 is a type I transmembrane glycoprotein known as α E integrin or Integrin α_{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- β stimulation. In association with integrin β_7 , CD103 is expressed as α E/ β_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.

Antigen
References:

1. Kilshaw PJ and SJ. Murant. 1990. *Eur. J. Immunol.* 20:2201.
2. Karecla PI, *et al.* 1995. *Eur. J. Immunol.* 25:852.
3. LeFrancois L, *et al.* 1994. *Eur. J. Immunol.* 24:635.
4. Sung SS, *et al*