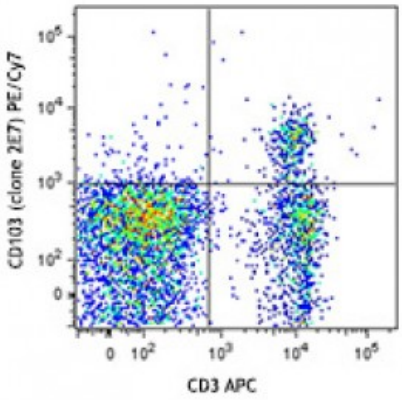
SONY

Product Data Sheet

PE/Cy7 anti-mouse CD103

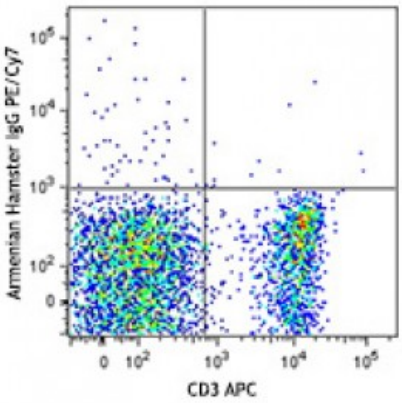
Catalog # / Size:	1207125 / 25 µg 1207130 / 100 µg
Clone:	2E7
Isotype:	Hamster IgG
Immunogen:	Mouse intestinal intraepithelial lymphocytes
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 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/Cy7 (top) or Armenian hamster PE/Cy7 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 ≤0.65 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
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 αE 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 $\alpha E/\beta_7$ 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.

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*