

PE/Cy7 anti-human CD103 (Integrin α E)

Catalog # / Size: 2351060 / 100 tests
2351055 / 25 tests

Clone: Ber-ACT8

Isotype: Mouse IgG1, κ

Immunogen: HTLV-1 induced human T cell line MAPS16

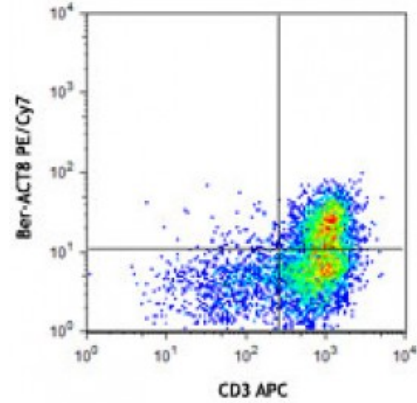
Reactivity: Human

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 and 0.2% (w/v) BSA (origin USA).

Workshop Number: V A067

Concentration: Lot-specific

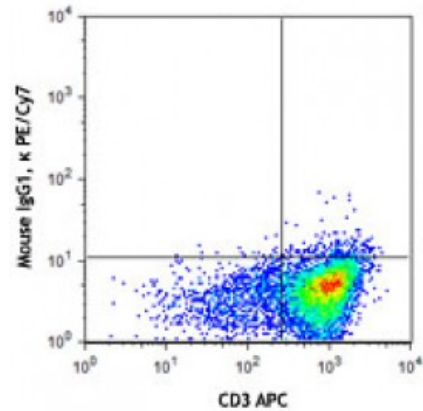


PHA-stimulated (day-3) human peripheral blood mononuclear cells were stained with CD3 APC and CD103 (clone Ber-ACT8) PE/Cy7 (top) or mouse IgG1, κ isotype control (bottom).

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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Application Notes: Additional reported applications (for the relevant formats) include: Western Blotting¹, immunoprecipitation¹, and immunohistochemical staining of frozen tissue sections¹.

Application References:

1. Kruschwitz M, *et al.* 1991. *J. Clin. Pathol.* 44:636. (WB, IP, IHC)
2. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
3. Marquardt N, *et al.* 2015. *J Immunol.* 194:2467. [PubMed](#)

Description: CD103 is a type I transmembrane glycoprotein also known as α E integrin, integrin α 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- β stimulation. In association with integrin β 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.

Antigen
References:

1. Parker CM, *et al.* 1992. *P. Natl. Acad. Sci. USA* 89:1924.
2. Kruschwitz M, *et al.* 1991. *J. Clin. Pathol.* 44:636.
3. Schon MP, *et al.* 1999. *J. Immunol.* 162:6641.
4. Shaw SK, *e*