

APC/Fire™ 750 anti-human CD103 (Integrin αE)

Catalog # / 2351190 / 100 tests
Size: 2351185 / 25 tests

Clone: Ber-ACT8

Isotype: Mouse IgG1, κ

Immunogen: HTLV-1 induced human T cell line MAPS16

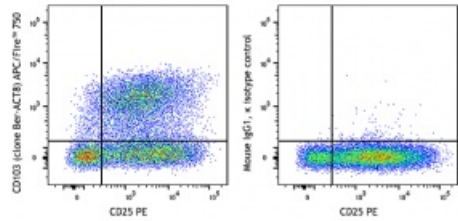
Reactivity: Human, Non-human primate

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

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 (3 day) human peripheral blood lymphocytes were stained with anti-human CD25 PE and anti-human CD103 (Integrin αE) (clone Ber-ACT8) APC/Fire™ 750 (left) or mouse IgG1, κ APC/Fire™ 750 isotype control (right).

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

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

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-F)
2. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

Description: CD103 is a type I transmembrane glycoprotein also known as α E integrin, integrin α EL 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 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. 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, *et al.* 1994. *J. Biol. Chem.* 269:6016.