

**APC/Fire™ 750 anti-mouse CD107a (LAMP-1)**

**Catalog # / Size:** 1208170 / 100 µg  
1208165 / 25 µg

**Clone:** 1D4B

**Isotype:** Rat IgG2a, κ

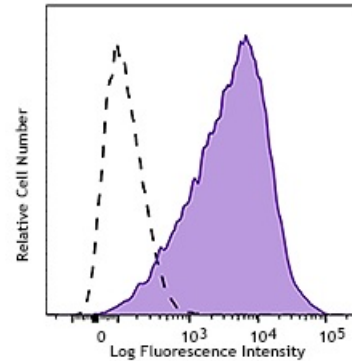
**Immunogen:** This monoclonal antibody was raised against NIH/3T3 mouse embryonic fibroblast tissue culture cell membranes. It has been mapped to the N-terminus of LAMP-1.

**Reactivity:** Mouse

**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.

**Concentration:** 0.2 mg/ml



Thioglycollate-elicited Balb/c mouse peritoneal macrophages were stained with CD107a (LAMP-1) (clone 1D4B) APC/Fire™ 750 (filled histogram) or rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

**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 approximately 1.0 µg per million cells in 100 µl volume. 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.

**Description:** CD103 is a type I transmembrane glycoprotein also known as αE integrin, integrin αIEL 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 β7, CD103 is expressed as an αE/β7 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.