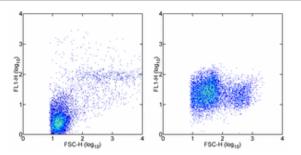


# Anti-Human CD107a (LAMP-1) Alexa Fluor® 488

Catalog Number: 53-1079

Also Known As:LAMP1, lysosomal-associated membrane protein 1

RUO: For Research Use Only



Left: 3-day PHA-stimulated normal human peripheral blood cells were surface stained with 0.125  $\mu g$  of Anti-Human CD107a (LAMP-1) Alexa Fluor® 488. Total viable cells were used for analysis. Right: Normal human peripheral blood cells were stained intracellularly with 0.125  $\mu g$  of Anti-Human CD107a (LAMP-1) Alexa Fluor® 488. Total cells were used for analysis.

#### **Product Information**

Contents: Anti-Human CD107a (LAMP-1) Alexa Fluor® 488

REF Catalog Number: 53-1079

Clone: eBioH4A3

Concentration: 5  $\mu$ l (0.125  $\mu$ g)/test Host/Isotype: Mouse IgG1,  $\kappa$  Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Carrier protein/Stabiliz

r Temperature Limitation: Store at 2-8°C. Do not freeze. Light

sensitive material.

Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

#### Description

The eBioH4A3 monoclonal antibody reacts with human CD107a, also known as lysosomal-associated membrane protein-1 (LAMP-1). CD107a is a highly glycosylated protein of approximately 110kDa. It is predominantly expressed intracellularly in the lysosomal/endosomal membrane in nearly all cells. CD107a is transiently expressed on the cell surface of degranulating cytolytic T cells, and is also upregulated on the surface of activated platelets and some cancer cells.

### **Applications Reported**

This eBioH4A3 antibody has been reported for use in intracellular staining followed by flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay.

## Applications Tested

This eBioH4A3 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human PBMCs. This can be used at 5  $\mu$ l (0.125  $\mu$ g)/per test. A test is defined as the amount ( $\mu$ g)/test of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

### References

Huynh C, Andrews NW. The small chemical vacuolin-1 alters the morphology of lysosomes without inhibiting Ca2+-regulated exocytosis. EMBO Rep. 2005 Sep;6(9):843-7. (H4A3, FC, IHC, PubMed)

Betts MR, Koup RA. Detection of T-cell degranulation: CD107a and b. Methods Cell Biol. 2004;75:497-512.(H4A3, FC, degranulation assay, PubMed)

Grutzkau A, Smorodchenko A, Lippert U, Kirchhof L, Artuc M, Henz BM. LAMP-1 and LAMP-2, but not LAMP-3, are reliable markers for activation-induced secretion of human mast cells. Cytometry A. 2004 Sep;61(1):62-8. (H4A3, FC, PubMed)

Sarafian V, Jadot M, Foidart JM, Letesson JJ, Van den Brule F, Castronovo V, Wattiaux R, Coninck SW. Expression of Lamp-1 and Lamp-2 and their interactions with galectin-3 in human tumor cells. Int. J. Cancer. 1998 Jan; 75(1):105-111. (H4A3, FC, IHC, PubMed)

Carlsson SR, Roth J, Piller F, Fukuda M. Isolation and characterization of human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Major sialoglycoproteins carrying polylactosaminoglycan. J Biol Chem. 1988 Dec 15;263(35):18911-9.

# **Related Products**

53-1071 Anti-Mouse CD107a (LAMP-1) Alexa Fluor® 488 (eBio1D4B (1D4B))

# 53-1078 Anti-Human CD107b (LAMP-2) Alexa Fluor® 488 (eBioH4B4 (H4B4)) 53-4714 Mouse IgG1 K Isotype Control Alexa Fluor® 488

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