For Research Use Only

## FITC Plus Anti-Human CD107a / LAMP1 (H4A3)

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Antibodies | ELISA kits | Proteins
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Catalog Number: FITC-65051

**Basic Information** 

Catalog Number:

FITC-65051

Size:

100 tests , 5  $\mu$ l/test

Source: Mouse

Isotype: IgG1, kappa UNIPROT ID: P11279

Full Name: lysosomal-associated membrane

GenBank Accession Number:

protein 1

BC006345

3916

GeneID (NCBI):

ENSEMBL Gene ID:

ENSG00000185896

Calculated MW: 45 kDa

Purification Method:

Affinity purification

CloneNo.:

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 10 ul per 10^6 cells in 100

µl suspension

H4A3

FC: 5 ul per 10^6 cells in 100 µl

suspension

Excitation/Emission maxima

wavelengths: 495 nm / 524 nm

**Applications** 

Tested Applications: IF/ICC, FC, FC (Intra) Species Specificity:

Human

Positive Controls:

IF/ICC: HeLa cells,
FC (Intra): HeLa cells,
FC: human PBMCs,

## **Background Information**

LAMP1 (CD107a) is a heavily glycosylated membrane protein enriched in the lysosomal membrane. LAMP1 is extensively glycosylated with asparagine-linked oligosaccharides which protect it from intracellular proteolysis (PMID: 10521503). Although LAMP1 is expressed largely in the endosome-lysosomal membrane of cells, it is also found on the plasma membrane (PMID: 16168398). Elevated LAMP1 expression at the cell surface has also been detected during platelet and granulocytic cell activation, as well as in some tumor cells (PMID: 29085473). LAMP1 functions to provide selectins with carbohydrate ligands. This protein has also been shown to be a marker of degranulation on lymphocytes such as CD8+ and NK cells and may also play a role in tumor cell differentiation and metastasis (PMID: 18835598; 29085473; 9426697).

Storage

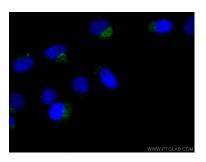
Storage

Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

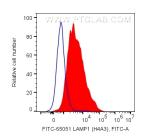
Storage Buffer:

PBS with 0.09% sodium azide and 0.5% BSA, pH7.3

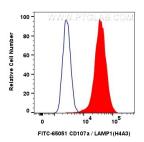
## **Selected Validation Data**



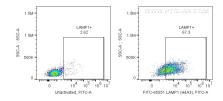
Immunofluorescent analysis of (4% PFA) fixed Hela cells using FITC-65051 (CD107a antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Mouse IgG(H+L).



1X10^6 PHA-activated human PBMCs were surface stained with 5 ul FITC Plus Plus Anti-Human CD107a (FITC-65051, Clone: H4A3). Unactivated PBMCs were used as negative control. Cells were not fixed. Lymphocytes were gated.



1x10^6 HeLa cells were intracellularly stained with 10 ul FITC Plus Anti-Human CD107a / LAMP1 (H4A3) (FITC-65051, Clone:H4A3)(red), or 10 ul FITC Plus Mouse IgG1 Isotype Control (MOPC-21) (FITC-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1X10^6 PHA-activated human PBMCs were surface stained with 5 ul FITC Plus Plus Anti-Human CD107a (FITC-65051, Clone: H4A3). Unactivated PBMCs were used as negative control. Cells were not fixed. Lymphocytes were gated.