

FITC Plus Anti-Human CD107a / LAMP1 (H4A3)

Catalog Number: FITC-65051

Basic Information

Catalog Number:

FITC-65051

Concentration:

100 tests, 5 µl/test

Source:

Mouse

Isotype:

IgG1, kappa

GenBank Accession Number:

BC006345

GeneID (NCBI):

3916

ENSEMBL Gene ID:

ENSG00000185896

UNIPROT ID:

P11279

Full Name:

lysosomal-associated membrane protein 1

Calculated MW:

45 kDa

Purification Method:

Affinity purification

CloneNo.:

H4A3

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 10 µl per 10⁶ cells in 100 µl suspensionFC: 5 µl per 10⁶ 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

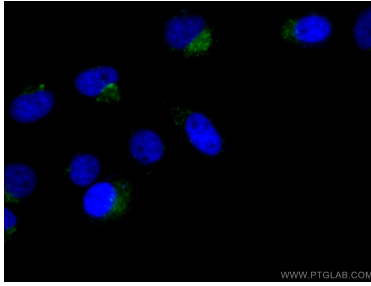
Storage:

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

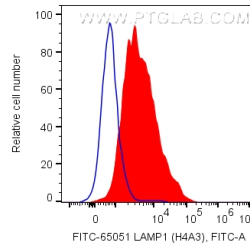
Storage Buffer:

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

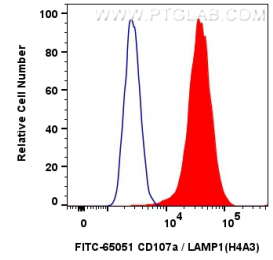
Selected Validation Data



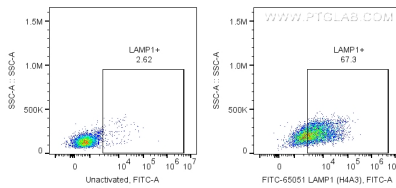
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using FITC-65051 (CD107a antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Mouse IgG(H+L).



1X10⁶ 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.



1x10⁶ 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).



1X10⁶ 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.