

CD107a (LAMP-1) Monoclonal Antibody (eBioH4A3), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioH4A3
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2016657

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	0.125 µg/mL	10 Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	12 Publications

Product Specific Information

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.

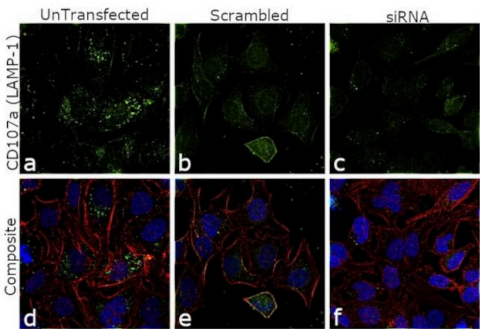
Applications Reported: This eBioH4A3 antibody has been reported for use in intracellular staining followed by flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay.

Applications Tested: This eBioH4A3 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

Excitation: 488 nm; **Emission:** 519 nm; **Laser:** Blue Laser.

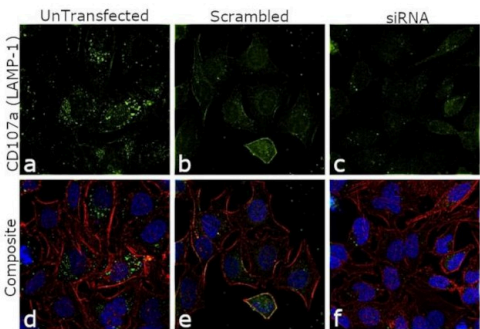
Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD107a (LAMP-1) Monoclonal Antibody (eBioH4A3), Alexa Fluor™ 488, eBioscience™



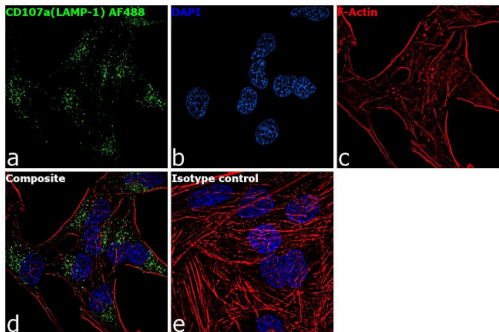
CD107a (LAMP-1) Antibody (53-1079-42)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. HeLa cells were transfected with CD107a (LAMP-1) siRNA and reduction of signal was observed in Immunofluorescence using CD107a (LAMP-1) Monoclonal Antibody, Alexa Fluor 488, eBioscience™ (Product # 53-1079-41). {KD}



CD107a (LAMP-1) Antibody (53-1079-42) in ICC/IF

Knockdown of CD107a (LAMP1) was achieved by transfecting HeLa cells with CD107a (LAMP1) specific siRNAs (Silencer® select Product # s8080, s8081). Immunofluorescence analysis was performed using untransfected HeLa cells (panels a, d), transfected with non-specific scrambled siRNA (panels b,e) and transfected with CD107a (LAMP1) specific siRNAs (panel c,f). Cells were fixed, permeabilized, and probed with LAMP1 Monoclonal Antibody (H4A3), Alexa Fluor 488 (Product # MA5-18121, 1:250 dilution). Nuclei (blue) were stained using ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962) and Rhodamine Phalloidin (Product # R415, 1:300) was used for cytoskeletal F-actin (red) staining. Reduction of specific cytoplasmic localization was observed upon siRNA mediated knockdown (panel c,f) confirming specificity of the antibody to CD107a (LAMP1). The images were captured at 60X magnification.



CD107a (LAMP-1) Antibody (53-1079-42) in ICC/IF

Immunofluorescence analysis of CD107a (LAMP-1) was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with CD107a(LAMP-1), Alexa Fluor 488, Mouse Monoclonal antibody (Product # 53-1079-41) at 0.125 µg/mL in 0.1% BSA and incubated at 4 degree Celsius overnight (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e represents the isotype control. The images were captured at 60X magnification.

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Western Blot (1)

Molecular medicine reports

Exosomes in serumfree cultures of THP1 macrophages infected with *Mycobacterium tuberculosis*.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 53-1079-42) in Western Blot"

Authors: Biadlegne F,Rademacher P,De Sulbaran YGJ,König B,Rodloff AC,Zedler U,Dorhoi A,Sack U

Year
2021

Immunohistochemistry (1)

International journal of molecular sciences

Multiple Immunostainings with Different Epitope Retrievals-The FOLGAS Protocol.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 53-1079-42) in Immunohistochemistry"

Authors: von Schoenfeld A,Bronsert P,Poc M,Fuller A,Filby A,Kraft S,Kurowski K,Sörensen K,Huber J,Pfeiffer J,Proietti M,Stehl V,Werner M,Seidl M

Year
2021

Immunocytochemistry (10)

Cancers

Erlotinib Promotes Ligand-Induced EGFR Degradation in 3D but Not 2D Cultures of Pancreatic Ductal Adenocarcinoma Cells.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 53-1079-42) in Immunocytochemistry"

Authors: Betriu N,Andreeva A,Semino CE

Year
2021

Scientific reports

Spatial and temporal VEGF receptor intracellular trafficking in microvascular and macrovascular endothelial cells.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 53-1079-42) in Immunocytochemistry"

Authors: Silva JAF,Qi X,Grant MB,Boulton ME

Year
2021

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More applications with references on thermofisher.cn

Flow (12)

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