

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

Product Details	
Size	25 µg
Species Reactivity	Human
Published Species	Cynomolgus monkey, Non-human primate, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioH4A3
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467426

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5 µg/test	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	5 µg/mL	-
Immunocytochemistry (ICC/IF)	5 µg/mL	7 Publications
Flow Cytometry (Flow)	0.5 µg/test	14 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: Purified anti-human CD107a (LAMP-1) has been reported for use in flow cytometric analysis, immunohistochemistry, immunocytochemistry, and immunoblotting. It has also been reported for use in surface staining in a flow cytometric based degranulation assay. (Fluorochrome conjugated eBioH4B4 (H4B4) is recommended for use in flow cytometry.).

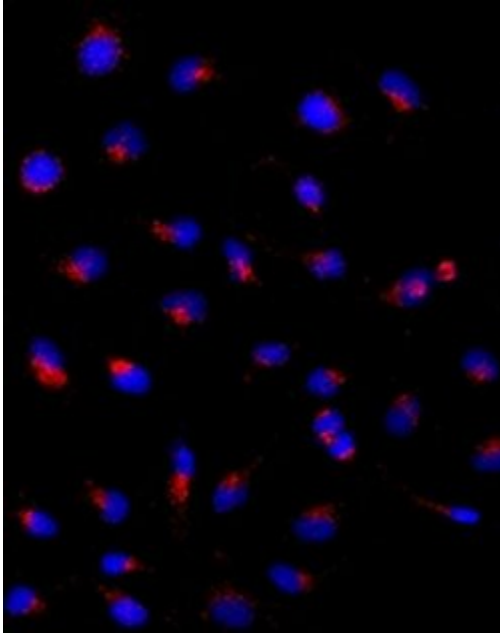
Applications Tested: This eBioH4A3 antibody has been tested by intracellular staining and flow cytometric analysis, immunocytochemistry of methanol-fixed cells, immunohistochemistry of formalin-fixed paraffin embedded human tissue using high or low pH antigen retrieval, or western blotting. For flow cytometry this can be used at less than or equal to 0.5 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. For both immunocytochemistry and immunohistochemistry, this can be used at less than or equal to 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

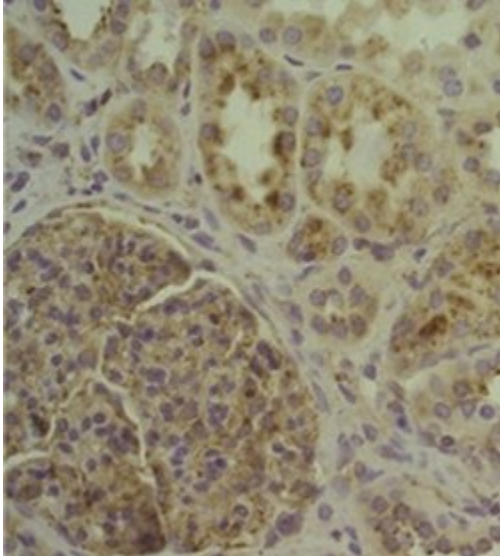
Filtration: 0.2 µm post-manufacturing filtered.

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



CD107a (LAMP-1) Antibody (14-1079-80) in ICC/IF

Immunocytochemistry of HeLa cells stained with 5 µg/mL Anti-Human CD107a (LAMP-1) Purified followed by F (ab')₂ Anti-Mouse IgG eFluor® 570 (left). Nuclei are stained with DAPI.

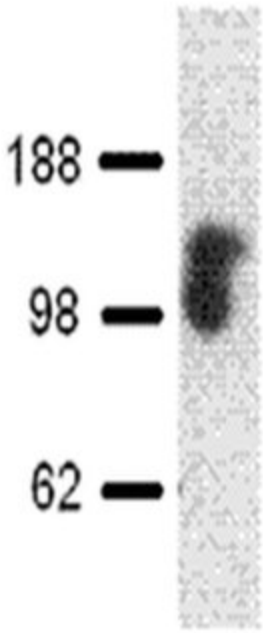


CD107a (LAMP-1) Antibody (14-1079-80) in IHC (P)

Immunohistochemistry of human formalin-fixed paraffin embedded kidney (right) stained with 5 µg/mL Anti-Human CD107a (LAMP-1) Purified followed by Anti-Mouse IgG Biotin, Avidin HRP followed by DAB visualization. Nuclei are counterstained with hematoxylin.

CD107a (LAMP-1) Antibody (14-1079-80) in WB

Normal human peripheral blood cells were lysed and 10 µg of total protein per lane was immunoblotted using 1 µg/mL of Anti-Human CD107a (LAMP-1) Purified and revealed with Anti-Mouse HRP (left). Immunocytochemistry of HeLa cells stained with 5 µg/mL Anti-Human CD107a (LAMP-1) Purified followed by F(ab')₂ Anti-Mouse IgG eFluor® 570 (center). Nuclei are stained with DAPI.



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Western Blot (1)

Biochemistry and biophysics reports

Lysosomal membrane permeabilization is involved in oxidative stress-induced apoptotic cell death in LAMP2-deficient iPSCs-derived cerebral cortical neurons.

"14-1079 was used in Western Blotting to suggest the involvement of lysosomal membrane permeabilization in the LAMP2 deficiency associated neural injury."

Authors: Law CY,Siu CW,Fan K,Lai WH,Au KW,Lau YM,Wong LY,Ho JCY,Lee YK,Tse HF,Ng KM

Species
Human

Dilution
Not Cited

Year
2016

Immunocytochemistry (7)

Scientific reports

Analysis of the intracellular traffic of IgG in the context of Down syndrome (trisomy 21).

"14-1079-80 was used in Immunocytochemistry to analyse the intracellular traffic of IgG mediated by the human neonatal Fc receptor (FcRn) in fibroblast cell lines with trisomy 21."

Authors: Cejas RB,Tamaño-Blanco M,Blanco JG

Species
Human

Dilution
1:100

Year
2021

Nature communications

A TNFRSF14-FcRI-mast cell pathway contributes to development of multiple features of asthma pathology in mice.

"14-1079 was used in Immunofluorescence to study the mechanisms by which TNFSF14 functions to promote airway remodelling in asthma."

Authors: Sibilano R,Gaudenzio N,DeGorter MK,Reber LL,Hernandez JD,Starkl PM,Zurek OW,Tsai M,Zahner S, Montgomery SB,Roers A,Kronenberg M,Yu M,Galli SJ

Species
Human

Dilution
Not Cited

Year
2016

[View more ICC/IF references on thermofisher.com](#)

Flow Cytometry (14)

Oncoimmunology

T cells targeting NY-ESO-1 demonstrate efficacy against disseminated neuroblastoma.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 14-1079-80) in Flow Cytometry"

Authors: Singh N,Kulikovskaya I,Barrett DM,Binder-Scholl G,Jakobsen B,Martinez D,Pawel B,June CH,Kalos MD, Grupp SA

Species
Not Applicable

Dilution
Not Cited

Year
2021

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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