CD107a (LAMP-1) Monoclonal Antibody (eBio1D4B (1D4B)), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio1D4B (1D4B)
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_657554

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	1 µg/test	25 Publications

Product Specific Information

Description: The eBio1D4B monoclonal antibody reacts with mouse CD107a, also known as lysosomal-associated membrane protein-1 (LAMP-1). CD107a is a type I, lysosomal membrane protein that is extensively glycosylated. It is expressed constitutively in the late endosomes-lysosomes in all cells. CD107a is also transiently expressed on the cell surface of degranulating cytolytic T cells. Additionally, CD107a has been implicated in a variety of cellular functions including cancer metastasis and is also a marker for lysosomal storage disorders.

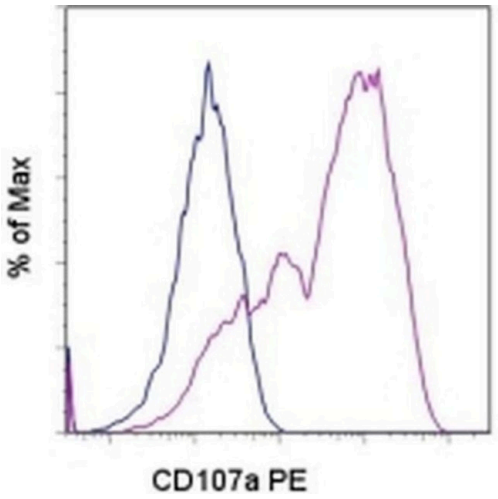
Applications Reported: This eBio1D4B (1D4B) antibody has been reported for use in intracellular staining followed by flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay.

Applications Tested: This eBio1D4B (1D4B) antibody has been tested by intracellular staining and flow cytometric analysis of thioglycolate-elicited peritoneal exudate cells. This can be used at less than or equal to 1 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD107a (LAMP-1) Monoclonal Antibody (eBio1D4B (1D4B)), PE, eBioscience™



CD107a (LAMP-1) Antibody (12-1071-82) in Flow
Intracellular staining of mouse thioglycolate-elicited peritoneal exudate cells with 0.5 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (blue histogram) or 0.5 µg of Anti-Mouse CD107a (LAMP-1) PE (purple histogram). Total viable cells were used for analysis.

View more figures on thermofisher.cn

27 References

Immunocytochemistry (2)

PloS one

Pyrimidinergic Receptor Activation Controls Toxoplasma gondii Infection in Macrophages.

"12-1071 was used in Immunocytochemistry to suggest that the activity of P2Y host cell receptors controls Toxoplasma gondii infection in macrophages."

Authors: Moreira-Souza AC,Marinho Y,Correa G,Santoro GF,Coutinho CM,Vommaro RC,Coutinho-Silva R

Year
2016

Species
Mouse

The Journal of clinical investigation

Cellular effectors mediating Th17-dependent clearance of pneumococcal colonization in mice.

"12-1071-82 was used in Immunocytochemistry to demonstrate that monocytes/macrophages and neutrophils recruited to the upper airway lumen are key effectors in clearing primary and secondary Streptococcal pneumoniae colonisation, respectively."

Authors: Zhang Z,Clarke TB,Weiser JN

Year
2009

Species
Mouse

Flow Cytometry (25)

Cancer immunology research

P. gingivalis Infection Upregulates PD-L1 Expression on Dendritic Cells, Suppresses CD8+ T-cell Responses, and Aggravates Oral Cancer.

"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 12-1071-82) in Flow Cytometry"

Authors: Ren J,Han X,Lohner H,Hoyle RG,Li J,Liang S,Wang H

Year
2023

Nature communications

CaMKII oxidation is a critical performance/disease trade-off acquired at the dawn of vertebrate evolution.

"12-1071-82 was used in Flow Cytometry to examine CaMKII and find that its activation by reactive oxygen species (ROS) was acquired more than half-a-billion years ago along the vertebrate stem lineage."

Authors: Wang Q,Hernández-Ochoa EO,Viswanathan MC,Blum ID,Do DC,Granger JM,Murphy KR,Wei AC,Aja S,Liu N, Antonescu CM,Florea LD,Talbot CC,Mohr D,Wagner KR,Regot S,Lovering RM,Gao P,Bianchet MA,Wu MN, Cammarato A,Schneider MF,Bever GS,Anderson ME

Year
2021

Species
Mouse

View more Flow references on thermofisher.cn

More applications with references on thermofisher.cn