

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.

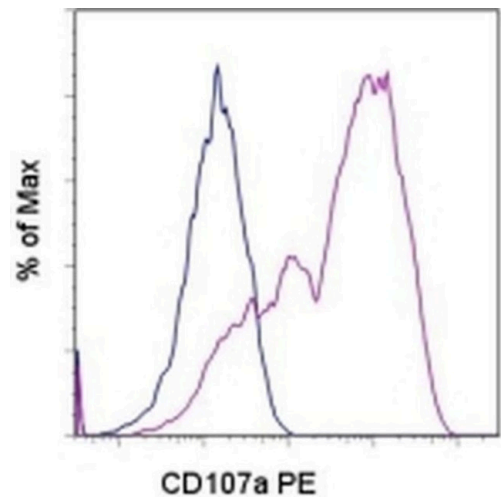
Applications Reported: This eBio1D4B (1D4B) antibody has been reported for use in intracellular staining followed by flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay.

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 10⁵ to 10⁸ 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.

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Immunocytochemistry (2)

<p>PloS one</p> <p>Pyrimidinerbic Receptor Activation Controls Toxoplasma gondii Infection in Macrophages.</p> <p>"12-1071 was used in Immunocytochemistry to suggest that the activity of P2Y host cell receptors controls Toxoplasma gondii infection in macrophages."</p> <p>Authors: Moreira-Souza AC,Marinho Y,Correa G,Santoro GF,Coutinho CM,Vommaro RC,Coutinho-Silva R</p>	<p>Year 2016</p> <p>Species Mouse</p>
<p>The Journal of clinical investigation</p> <p>Cellular effectors mediating Th17-dependent clearance of pneumococcal colonization in mice.</p> <p>"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."</p> <p>Authors: Zhang Z,Clarke TB,Weiser JN</p>	<p>Year 2009</p> <p>Species Mouse</p>

Flow Cytometry (25)

<p>Cancer immunology research</p> <p>P. gingivalis Infection Upregulates PD-L1 Expression on Dendritic Cells, Suppresses CD8+ T-cell Responses, and Aggravates Oral Cancer.</p> <p>"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 12-1071-82) in Flow Cytometry"</p> <p>Authors: Ren J,Han X,Lohner H,Hoyle RG,Li J,Liang S,Wang H</p>	<p>Year 2023</p>
<p>Nature communications</p> <p>CaMKII oxidation is a critical performance/disease trade-off acquired at the dawn of vertebrate evolution.</p> <p>"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."</p> <p>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</p>	<p>Year 2021</p> <p>Species Mouse</p>

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