

# 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.

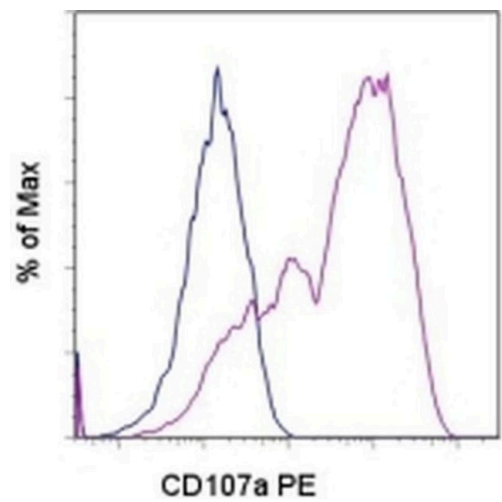
**Applications Reported:** This eBio1D4B (1D4B) antibody has been reported for use in intracellular staining followed by flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay.

**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<sup>5</sup> to 10<sup>8</sup> 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.com](https://thermofisher.com)

Immunocytochemistry (2)

<p>PloS one</p> <p><b>Pyrimidinerbic Receptor Activation Controls Toxoplasma gondii Infection in Macrophages.</b></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><b>Cellular effectors mediating Th17-dependent clearance of pneumococcal colonization in mice.</b></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><b>P. gingivalis Infection Upregulates PD-L1 Expression on Dendritic Cells, Suppresses CD8+ T-cell Responses, and Aggravates Oral Cancer.</b></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><b>CaMKII oxidation is a critical performance/disease trade-off acquired at the dawn of vertebrate evolution.</b></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>

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

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.