

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	eBio1D4B (1D4B)
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_657531

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	5 Publications
Immunohistochemistry (IHC)	-	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	15 Publications
Flow Cytometry (Flow)	0.5 µg/test	30 Publications
Immunoprecipitation (IP)	Assay-Dependent	-

## 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, immunoprecipitation, western blotting, immunohistochemical staining of frozen tissue sections, and immunohistochemical staining of formalin-fixed paraffin embedded tissue sections. (Fluorochrome conjugated eBio1D4B (1D4B) is recommended for use in intracellular flow cytometry.).

**Applications Tested:** This eBio1D4B (1D4B) antibody has been tested by intracellular staining and flow cytometric analysis of mouse thioglycolate-elicited peritoneal exudate cells. 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal

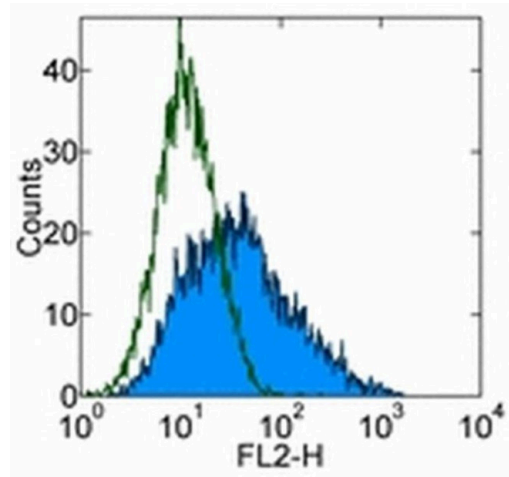
performance in the assay of interest.

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 (eBio1D4B (1D4B)), eBioscience™**



**CD107a (LAMP-1) Antibody (14-1071-82) in Flow**  
Staining of BALB/c thioglycolate-induced peritoneal exudate cells with 0.25 µg of Rat IgG2a K Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.25 µg of Anti-Mouse CD107a (LAMP-1) Purified (filled histogram) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and subsequently Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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Western Blot (5)

<p>Nature communications</p> <p><b>A bacterial autotransporter impairs innate immune responses by targeting the transcription factor TFE3.</b></p> <p>"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 14-1071-82) in Western Blot"</p> <p>Authors: Ta A,Ricci-Azevedo R,Vasudevan SO,Wright SS,Kumari P,Havira MS,Surendran Nair M,Rathinam VA,Vanaja SK</p>	<p>Year</p> <p>2023</p>
<p>Frontiers in pharmacology</p> <p><b>An 8-Hydroxy-Quinoline Derivative Protects Against Lipopolysaccharide-Induced Lethality in Endotoxemia by Inhibiting HMGB1-Mediated Caspase-11 Signaling.</b></p> <p>"Published figure using CD107a (LAMP-1) monoclonal antibody (Product # 14-1071-82) in Western Blot"</p> <p>Authors: Wang X,Shi J,Li Z,Li L,Zhang R,Bai Y,Li J,Liang F,Tang Y</p>	<p>Year</p> <p>2021</p>

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Immunohistochemistry (4)

<p>Cell reports</p> <p><b>Microglial lysosome dysfunction contributes to white matter pathology and TDP-43 proteinopathy in GRN-associated FTD.</b></p> <p>"14-1071-82 was used in Immunohistochemistry-immunofluorescence to imply that PGRN loss affects microglial activation and lysosomal function, resulting in the accumulation of myelin debris and contributing to TDP-43 pathology."</p> <p>Authors: Wu Y,Shao W,Todd TW,Tong J,Yue M,Koga S,Castanedes-Casey M,Librero AL,Lee CW,Mackenzie IR,Dickson DW,Zhang YJ,Petrucelli L,Prudencio M</p>	<p>Year</p> <p>2021</p> <p>Species</p> <p>Mouse</p>
<p>JCI insight</p> <p><b>The UPR preserves mature oligodendrocyte viability and function in adults by regulating autophagy of PLP.</b></p> <p>"14-1071 was used in Immunohistochemistry-immunofluorescence to investigate the role of UPR for maintaining oligodendrocyte viability and function."</p> <p>Authors: Stone S,Wu S,Nave KA,Lin W</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Mouse</p> <p>Dilution</p> <p>1:100</p>

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More applications with references on thermofisher.com

- IHC (P) (1)
- ICC/IF (15)
- Flow (30)

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