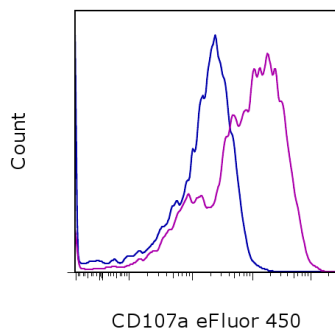


## Anti-Mouse CD107a (LAMP-1) eFluor® 450

**Catalog Number:** 48-1071

**Also known as:** lysosomal-associated membrane protein 1

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Intracellular staining of mouse thioglycolate-elicited peritoneal exudate cells with 0.25 µg of Rat IgG2a K Isotype Control eFluor® 450 (cat. 48-4321) (blue histogram) or 0.25 µg of Anti-Mouse CD107a (LAMP-1) eFluor® 450 (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor® 660 (cat. 65-0864), were used for analysis.

### Product Information

**Contents:** Anti-Mouse CD107a (LAMP-1) eFluor® 450



**Catalog Number:** 48-1071

**Clone:** eBio1D4B (1D4B)

**Concentration:** 0.2 mg/mL

**Host/Isotype:** Rat IgG2a, kappa



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C. Do not freeze. Light-sensitive material.

**Batch Code:** Refer to vial

**Use By:** Refer to vial

**Contains sodium azide**

### 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 1D4B antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

### Applications Tested

This 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.

**eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.**

### References

Wolint P, Betts MR, Koup RA, Oxenius A. Immediate cytotoxicity but not degranulation distinguishes effector and memory subsets of CD8+ T cells. J Exp Med. 2004 Apr 5;199(7):925-36.(1D4B, degranulation assay, PubMed)

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Gough NR, Zweifel ME, Martinez-Augustin O, Aguilar RC, Bonifacino JS, Fambrough DM. Utilization of the indirect lysosome targeting pathway by lysosome-associated membrane proteins (LAMPs) is influenced largely by the C-

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terminal residue of their GYXXphi targeting signals. J Cell Sci. 1999 Dec;112 ( Pt 23):4257-69. (**1D4B**, IF, PubMed)

Rohrer J, Schweizer A, Russell D, Kornfeld S. The targeting of Lamp1 to lysosomes is dependent on the spacing of its cytoplasmic tail tyrosine sorting motif relative to the membrane. J Cell Biol. 1996 Feb;132(4):565-76. (**1D4B**, immunoelectron microscopy, PubMed)

Chen JW, Pan W, D'Souza MP, August JT. Lysosome-associated membrane proteins: characterization of LAMP-1 of macrophage P388 and mouse embryo 3T3 cultured cells. Arch Biochem Biophys. 1985 Jun;239(2):574-86. (**1D4B**, CD107a purification, PubMed)

### **Related Products**

48-4321 Rat IgG2a K Isotype Control eFluor® 450 (eBR2a)

65-0864 Fixable Viability Dye eFluor® 660

88-8823 Fixation & Permeabilization Buffers