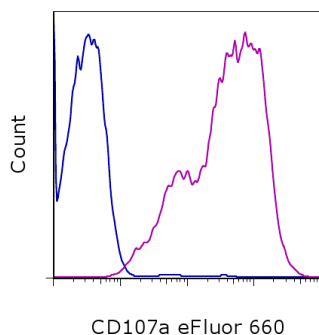


Anti-Mouse CD107a (LAMP-1) eFluor® 660 (Alexa® 647 Replacement)

Catalog Number: 50-1071

Also known as: Lysosome-associated membrane glycoprotein 1

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



Intracellular staining of BALB/c thioglycolate-induced peritoneal exudate cells with 0.125 ug of Rat IgG2a K Isotype Control eFluor® 660 (cat. 50-4321) (blue histogram) or 0.125 ug of Anti-Mouse CD107a (LAMP-1) eFluor® 660 (purple histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD107a (LAMP-1) eFluor® 660 (Alexa® 647 Replacement)

Catalog Number: 50-1071

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 eBio1D4B (1D4B) antibody has been reported for use in intracellular staining and 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 mouse thioglycolate-induced peritoneal exudate cells. This can be used at less than or equal to 0.25 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.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

References

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Betts MR, Koup RA. Detection of T-cell degranulation: CD107a and b. Methods Cell Biol. 2004;75:497-512.

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lysosome targeting pathway by lysosome-associated membrane proteins (LAMPs) is influenced largely by the C-terminal residue of their GYXXphi targeting signals. J Cell Sci. 1999 Dec;112 (Pt 23):4257-69. (**1D4B**, IF, PubMed)

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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

00-4222 Flow Cytometry Staining Buffer

00-8222 IC Fixation Buffer

00-8333 Permeabilization Buffer (10X)

50-4321 Rat IgG2a K Isotype Control eFluor® 660 (eBR2a)

53-1072 Anti-Mouse CD107b (LAMP-2) Alexa Fluor® 488 (eBioABL-93 (ABL-93))