

## Anti-Human CD107b (LAMP-2) Alexa Fluor<sup>®</sup> 488

**Catalog Number:** 53-1078

**Also known as:** LAMP2, lysosomal-associated membrane protein 2

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

### Product Information

**Contents:** Anti-Human CD107b (LAMP-2)

Alexa Fluor<sup>®</sup> 488

 **Catalog Number:** 53-1078

**Clone:** eBioH4B4 (H4B4)

**Concentration:** 5 uL (0.25 ug)/test

**Host/Isotype:** Mouse IgG1, 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

**Caution, contains Azide**



### Description

The eBioH4B4 monoclonal antibody reacts with human CD107b, also known as lysosomal-associated membrane protein-2 (LAMP-2). CD107b is a highly glycosylated, type I transmembrane protein of approximately 105 kDa. It is expressed intracellularly in lysosomal/endosomal membranes in nearly all cells. It is also expressed on the surface of degranulating T cells (to a lesser extent than CD107a) and activated platelets as well as some cancer cells. In humans, mutations in CD107b results in a lysosomal glycogen storage disorder, known as Danon disease.

### Applications Reported

This eBioH4B4 (H4B4) 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 eBioH4B4 (H4B4) antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of Jurkat cell line. This can be used at 5 µL (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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

### References

Betts MR, Koup RA. Detection of T-cell degranulation: CD107a and b. *Methods Cell Biol.* 2004;75:497-512. (**H4B4**, FC, degranulation assay, PubMed)

Grutzkau A, Smorodchenko A, Lippert U, Kirchhof L, Artuc M, Henz BM. LAMP-1 and LAMP-2, but not LAMP-3, are reliable markers for activation-induced secretion of human mast cells. *Cytometry A.* 2004 Sep;61(1):62-8. (**H4B4**, FC, PubMed)

Eskelinen EL, Illert AL, Tanaka Y, Schwarzmann G, Blanz J, Von Figura K, Saftig P. Role of LAMP-2 in lysosome biogenesis and autophagy. *Mol Biol Cell.* 2002 Sep;13(9):3355-68.

Nishino I, Fu J, Tanji K, Yamada T, Shimojo S, Koori T, Mora M, Riggs JE, Oh SJ, Koga Y, Sue CM, Yamamoto A, Murakami N, Shanske S, Byrne E, Bonilla E, Nonaka I, DiMauro S, Hirano M. Primary LAMP-2 deficiency causes X-linked vacuolar cardiomyopathy and myopathy (Danon disease). *Nature.* 2000;406:906-910. (**H4B4**, IHC, PubMed)

Carlsson SR, Roth J, Piller F, Fukuda M. Isolation and characterization of human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Major sialoglycoproteins carrying polylectosaminoglycan. *J Biol Chem.* 1988 Dec 15;263(35):18911-9.

### Related Products

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

53-1079 Anti-Human CD107a (LAMP-1) Alexa Fluor<sup>®</sup> 488 (eBioH4A3)

53-4714 Mouse IgG1 K Isotype Control Alexa Fluor<sup>®</sup> 488 (P3.6.2.8.1)

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