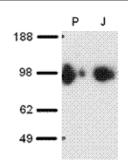


Anti-Human CD107b (LAMP-2) Purified

Catalog Number: 14-1078

Also Known As:LAMP2, lysosomal-associated membrane protein 2 RUO: For Research Use Only. Not for use in diagnostic procedures.



Normal human peripheral blood cells (P) and Jurkat cell line (J) lysates were immunoblotted with 1 μ g/ml of Anti-Human CD107b (LAMP-2) Purified and revealed with Anti-Mouse HRP.

Product Information

Contents: Anti-Human CD107b (LAMP-2) Purified
Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

REF Catalog Number: 14-1078
Clone: eBioH4B4 (H4B4)

Clone: eBioH4B4 (H4B4)
Image: Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG1, kappa
Image: Batch Code: Refer to Vial

Image: Visit Solution of the second s

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

Purified anti-human CD107b (LAMP-2) has been reported for use in flow cytometric analysis. It has also been reported for use in surface staining in a flow cytometric based degranulation assay. (Fluorochrome conjugated eBioH4B4 (H4B4) is recommended for use in flow cytometry.)

Applications Tested

This eBioH4B4 (H4B4) antibody has been tested by intracellular staining and flow cytometric analysis of Jurkat cell line. This can be used at less than or equal to 0.5 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. This antibody has also been tested by immunoblotting at 1 μ g/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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 activationinduced 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 polylactosaminoglycan. J Biol Chem. 1988 Dec 15;263(35):18911-9. Not for further distribution without written consent. Copyright © 2000-2012 eBioscience, Inc. Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com