

Human LAMP-1/CD107a APC-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 508921

Catalog Number: IC4800A 100 TESTS

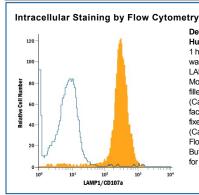
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human LAMP1/CD107a in direct ELISAs and Western blots.		
Source	Monoclonal Mouse IgG _{2B} Clone # 508921		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LAMP1/CD107a Ala28-Asn380 Accession # P11279		
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.		

APPLICATIONS

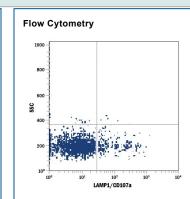
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μL/10 ⁶ cells	See Below
Intracellular Staining by Flow Cytometry	10 μL/10 ⁶ cells	See Below

DATA



Detection of LAMP1/CD107a in THP-1 Human Cell Line by Flow Cytometry. THP-1 human acute monocytic leukemia cell line was stained with Mouse Anti-Human LAMP1/CD107a APC-conjugated Monoclonal Antibody (Catalog # IC4800A, filled histogram) or isotype control antibody (Catalog # IC0041A, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.



Detection of LAMP1/CD107a in Human NK cells by Flow Cytometry. Enriched human NK cells incubated with K562 human chronic myelogenous leukemia cell line target cells for 3 hours were surface stained with Mouse Anti-Human LAMP1/CD107a APC-conjugated Monoclonal Antibody (Catalog # IC4800A). Quadrant markers were set based upon LAMP1/CD107a staining of NK cells incubated in the absence of K562 target cells.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage

Protect from light. Do not freeze.

• 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Lysosome-Associated Membrane Protein-1 (LAMP1), also known as CD107a, is a 100-130 kDa member of the LAMP family of glycoproteins. It is expressed in lysosomal and plasma membranes of macrophages, NK and T-cells, and with LAMP2, is essential for the formation of phagolysosomes. On the cell surface, it also presents carbohydrates to selectins. Mature human LAMP1 is a 389 amino acid (aa) type I transmembrane glycoprotein. It contains a 354 aa luminal/extracellular domain (ECD) (aa 28-381) and a 12 aa cytoplasmic tail (aa 405-416). The ECD has two large looping regions (aa 28-193 and 227-381) plus multiple N- and O-linked glycosylation sites. There is one potential splice variant that shows a 26 aa substitution in the signal sequence. Over aa 28-380, human LAMP1 shares 64% aa identity with mouse LAMP1.

