

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse LAMP1/CD107a Luminal Domain in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human LAMP1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse LAMP1/CD107a Leu25-Asn370 Accession # P11438
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

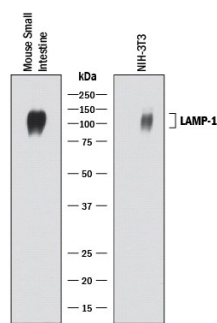
APPLICATIONS

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
Western Blot	0.2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

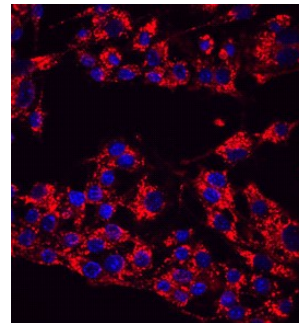
DATA

Western Blot



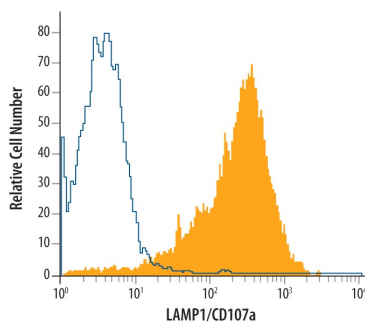
Detection of Mouse LAMP-1/CD107a by Western Blot. Western blot shows lysates of mouse small intestine tissue and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Mouse LAMP-1/CD107a Luminal Domain Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4320) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for LAMP-1/CD107a at approximately 100-120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



LAMP1/CD107a in RAW 264.7 Mouse Cell Line. LAMP1/CD107a was detected in immersion fixed RAW 264.7 mouse monocyte/macrophage cell line using Goat Anti-Mouse LAMP1/CD107a Luminal Domain Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4320) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Intracellular Staining by Flow Cytometry



Detection of LAMP-1 in RAW 264.7 Mouse Cell Line by Flow Cytometry. RAW 264.7 mouse monocyte/macrophage cell line was stained with Goat Anti-Mouse LAMP1/CD107a Luminal Domain Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4320, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108). 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](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

LAMP-1 (lysosome-associated membrane glycoprotein 1; also P2B and CD107a) is a 120 kDa member of the LAMP family of proteins. It is a highly glycosylated type I transmembrane protein whose N-terminus projects either extracellularly or into the lumen of lysosomes. LAMP-1 may protect lysosomal membranes from enzymatic attack or mediate fusion of phagosomes with lysosomes. Mature mouse LAMP1 is 382 amino acids (aa) in length. It contains a 346 aa luminal domain (aa 25-370) and a 12 aa cytoplasmic region. Over aa 25-370, mouse LAMP1 shares 82% and 62% aa identity with rat and human LAMP1, respectively.