

DESCRIPTION

Species Reactivity	Human
Specificity	Designed to visualize the expression of LAMP1 by fluorescence microscopy for staining cells and tissues. Conjugated LAMP1 antibodies are ideal for immunocytochemistry colocalization studies in lysosomes. The unconjugated antibody detects human LAMP1/CD107a Luminal Domain in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse LAMP1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LAMP1/CD107a Ala28-Asn380 Accession # P11279
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a 10X 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.

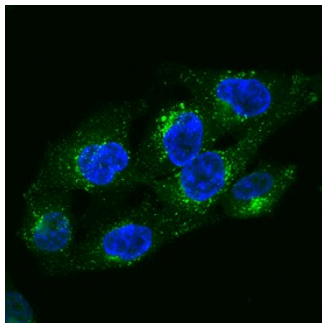
APPLICATIONS

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
Immunocytochemistry	1:10 dilution	See Below

DATA

Immunocytochemistry



LAMP1/CD107a in HeLa Human Cell Line. LAMP1/CD107a was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human LAMP1/CD107a Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # IC7985G) at 1:10 dilution for 3 hours at room temperature and counterstained with DAPI (blue). Specific staining was localized to lysosomes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

LAMP1 (Lysosome-associated membrane protein-1; also 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.

PRODUCT SPECIFIC NOTICES

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