

**LAMP1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1823a**

**Specification**

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**LAMP1 Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P11279</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>125-154</b>

**LAMP1 Antibody (N-term) - Additional Information**

**Gene ID** 3916

**Other Names**

Lysosome-associated membrane glycoprotein 1, LAMP-1, Lysosome-associated membrane protein 1, CD107 antigen-like family member A, CD107a, LAMP1

**Target/Specificity**

This LAMP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 125-154 amino acids from the N-terminal region of human LAMP1.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

LAMP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**LAMP1 Antibody (N-term) - Protein Information**

**Name** LAMP1 {ECO:0000303|PubMed:23632890, ECO:0000312|HGNC:HGNC:6499}

**Function** Lysosomal membrane glycoprotein which plays an important role in lysosome biogenesis, lysosomal pH regulation, autophagy and cholesterol homeostasis (PubMed:[37390818](#)).

Acts as an important regulator of lysosomal lumen pH regulation by acting as a direct inhibitor of the proton channel TMEM175, facilitating lysosomal acidification for optimal hydrolase activity (PubMed:[37390818](#)). Also plays an important role in NK-cells cytotoxicity (PubMed:[2022921](#), PubMed:[23632890](#)). Mechanistically, participates in cytotoxic granule movement to the cell surface and perforin trafficking to the lytic granule (PubMed:[23632890](#)). In addition, protects NK-cells from degranulation-associated damage induced by their own cytotoxic granule content (PubMed:[23847195](#)). Presents carbohydrate ligands to selectins (PubMed:[7685349](#)).

### Cellular Location

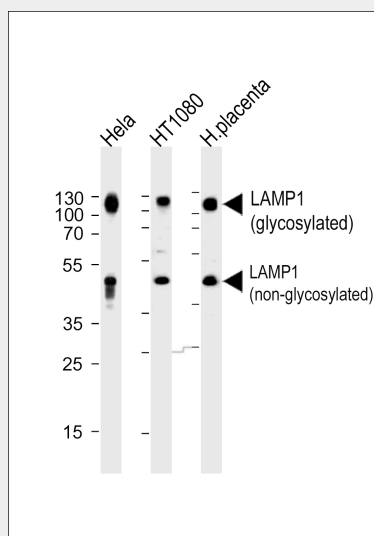
Lysosome membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Cytolytic granule membrane; Single-pass type I membrane protein. Note=This protein shuttles between lysosomes, endosomes, and the plasma membrane (By similarity). Colocalizes with OSBPL1A at the late endosome (PubMed:[16176980](#)). {ECO:0000250|UniProtKB:P05300, ECO:0000269|PubMed:[16176980](#), ECO:0000269|PubMed:[17897319](#)}

### LAMP1 Antibody (N-term) - Protocols

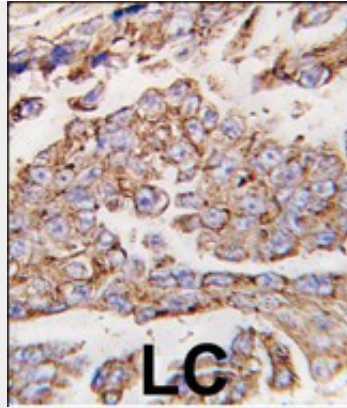
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### LAMP1 Antibody (N-term) - Images



Western blot analysis of lysates from HeLa, HT1080 cell line and human placenta tissue (from left to right), using LAMP1 Antibody (N-term) (Cat. #AP1823a). AP1823a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with \*LAMP1 antibody (N-term) (Cat.#AP1823a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **LAMP1 Antibody (N-term) - Background**

LAMP1 is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may also play a role in tumor cell metastasis.

### **LAMP1 Antibody (N-term) - References**

References for protein:

1. Fukuda M., J. Biol. Chem. 263:18920-18928(1988).
2. Sawada R., J. Biol. Chem. 268:9014-9022(1993).

References for U251 cell line:

1. Westermark B.; Pontén J.; Hugosson R. (1973). "Determinants for the establishment of permanent tissue culture lines from human gliomas". Acta Pathol Microbiol Scand A. 81:791-805. [PMID: 4359449].
2. Pontén, J., Westermark B. (1978). "Properties of Human Malignant Glioma Cells in Vitro". Medical Biology 56: 184-193.[PMID: 359950].
3. Geng Y.; Kohli L.; Klocke B.J.; Roth K.A.(2010). "Chloroquine-induced autophagic vacuole accumulation and cell death in glioma cells is p53 independent". Neuro Oncol. 12(5): 473-481.[PMID: 20406898].

### **LAMP1 Antibody (N-term) - Citations**

- [Helicobacter pylori cholesterol glucosylation modulates autophagy for increasing intracellular survival in macrophages.](#)
- [The role of lysosomes and autophagosomes in Frontotemporal Lobar Degeneration.](#)
- [A rapid method to improve protein detection by indirect ELISA.](#)
- [Involvement of autophagy in oncogenic K-Ras-induced malignant cell transformation.](#)
- [Granulovacuolar degeneration \(GVD\) bodies of Alzheimer's disease \(AD\) resemble late-stage autophagic organelles.](#)
- [The Rac1/MKK7/JNK pathway signals upregulation of Atg5 and subsequent autophagic cell death in response to oncogenic Ras.](#)