



# Mouse Anti-Human LAMP1 monoclonal antibody, clone NN10 (CABT-ZB616)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human LAMP1
<b>Target</b>	LAMP1
<b>Immunogen</b>	Recombinant Human LAMP-1/CD107a/LAMP1 Protein
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN10
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB616 - CABT-ZB965 This antibody will detect LAMP1 in antibody pair set. [ABPR-ZB195]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human LAMP-1 / CD107a / LAMP1. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 µL, 100 µL, 200 µL, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** Lysosome-associated membrane glycoprotein 1, also known as CD107 antigen-like family member A, CD107a, and LAMP1, is a single-pass type I membrane protein that belongs to the LAMP family. CD107a is expressed largely in the endosome-lysosome membranes of cells but is also found on the plasma membrane (1-2% of total LAMP1). LAMP1 has been implicated in a variety of cellular functions, including cancer metastasis. It has been proposed LAMP1 serves as a therapeutic agent for some cancers, as well as a marker for lysosomal storage disorders and different cell types such as cytotoxic T cells. LAMP2, also known as CD107b, may also play a role in tumor cell metastasis and functions in the protection, maintenance, and adhesion of the lysosome. Cell surface LAMP1 and LAMP2 have been shown to promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium, therefore they are possibly involved in the adhesion of PBMCs to the site of inflammation. LAMP-1 is a glycoprotein highly expressed in lysosomal membranes. The present study was initiated to test LAMP-1 mRNA and protein levels in post mortem frontal cortex (area 8) of Alzheimer's disease (AD) stages I-IIA/B and stages V-VIC of Braak and Braak, compared with age-matched controls. LAMP-1 occurred in microglia and multinucleated giant cells in one AD case in which amyloid burden was cleared following beta A-peptide immunization. Also, LAMP-1 has been suggested to be a cell surface receptor for a specific amelogenin isoform, leucine-rich amelogenin peptide, or LRAP. LAMP-1 can serve as a cell surface binding site for amelogenin on dental follicle cells and cementoblasts.

**Keywords** LAMP1; lysosomal-associated membrane protein 1; LAMPA; CD107a

## GENE INFORMATION

<b>Synonyms</b>	LAMP1; lysosomal-associated membrane protein 1; LAMPA; CD107a; LGP120; lysosome-associated membrane glycoprotein 1; LAMP-1; CD107 antigen-like family member A; lysosome-associated membrane protein 1
<b>Entrez Gene ID</b>	<a href="#">3916</a>

