

## Anti-LAMP1 Antibody Picoband®

Catalog Number: PA1822

### About LAMP1

LAMP1 (lysosomal-associated membrane protein 1) also called LAMPA, LGP120 or CD107A, 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. CD107a has also been shown to be a marker of degranulation on lymphocytes such as CD8+ and NK cells. By means of in situ hybridization, Mattei et al. (1990) assigned the LAMP1 gene to chromosome 13q34. A related gene, which may be a pseudogene, mapped to chromosome 12p13.3. Hybridization of LAMP1 cDNA to chromosome 12p13.3 was observed even when probes representing different portions of the LAMP1 cDNA were used.

### Overview

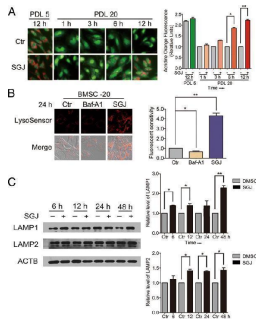
Product Name	Anti-LAMP1 Antibody Picoband®
Reactive Species	Human, Mouse
Description	Boster Bio Anti-LAMP1 Antibody catalog # PA1822. Tested in WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11279

### Technical Details

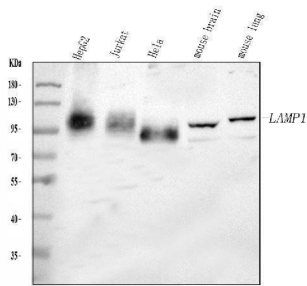
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human LAMP1, different from the related mouse and rat sequences by one amino acid.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse

## Anti-LAMP1 Antibody Picoband® (PA1822) Images



SGJ increased the concentration of H<sup>+</sup> in lysosomes, and up-regulated LAMP1 and LAMP2 protein level. a Acridine orange staining for young (PDL 5) and senescent (PDL 20) BMSCs. Acidic vacuoles declined with age as shown in the results. Twenty-micromolar SGJ treatments for 1, 3, 6, and 12 h significantly restored the amount of acidic vacuoles (magnification × 200). b SGJ promoted lysosomal acidification. Lysosensor™ Green DND-189 was used to sense the changes of the concentration of H<sup>+</sup> in lysosomes, and quantification. BMSCs were treated with 20 nM Baf-A1 or 20 μM SGJ for 24 h. The changes of the red fluorescence reflect changes in lysosomal pH. c Western blot analysis of LAMP1 and LAMP2 protein levels with beta-actin as a loading control, and quantification. BMSCs were treated with 20 μM SGJ for 6, 12, 24 and 48 h. (\*, p



Western blot analysis of LAMP1 using anti-LAMP1 antibody (PA1822). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 μg of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human HeLa whole cell lysates, Lane 4: mouse brain tissue lysates, Lane 5: mouse lung tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LAMP1 antigen affinity purified polyclonal antibody (Catalog # PA1822) at 0.5 μg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for LAMP1 at approximately 90-120 kDa (Glycosylation). The expected band size for LAMP1 is at 42 kDa.

## 1 Publications Citing This Product

1. PubMed ID: 33203874, Ma WQ,Sun XJ,Zhu Y,Liu NF. PDK4 promotes vascular calcification by interfering with autophagic activity and metabolic reprogramming. Cell Death Dis.2020 Nov 17;11(11):991.doi:10.1038/s41419-020-03162-w. PMID:33203874;PMCID:PMC7673024.

Visit [bosterbio.com/anti-lamp1-antibody-pa1822-boster.html](http://bosterbio.com/anti-lamp1-antibody-pa1822-boster.html) to see all 1 publications.

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Anti-LAMP1 Antibody

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