

LAMP2 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rabbit, Rat, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic Peptide: C G(400) L K R H H T G Y E Q F(411)
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2134625

Applications	Tested Dilution	Publications
Western Blot (WB)	1:100-1:1,000	15 Publications
Immunohistochemistry (IHC)	1:20	4 Publications
Immunocytochemistry (ICC/IF)	Assay-dependent	8 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

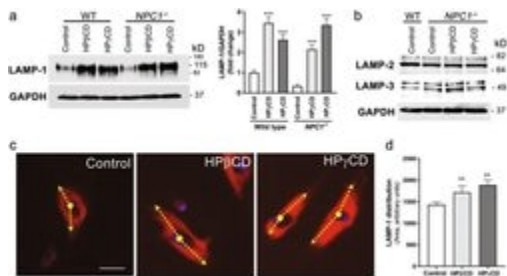
PA1-655 detects lysosome-associated membrane protein-2 (LAMP2) from rat, mouse and human tissues.

PA1-655 has been successfully used in Western blot, immunofluorescence, and immunohistochemistry. By Western blot, this antibody detects glycosylated and non-glycosylated LAMP-2, depending on the lysis buffer used.

PA1-655 immunizing peptide corresponds to amino acid residues 400-411 from rat LAMP2. This sequence is completely conserved between rat, mouse, and guinea pig LAMP2. PA1-655 immunizing peptide (Cat. # PEP-039) is available for use in neutralization and control experiments.

LAMP2 Antibody (PA1-655)

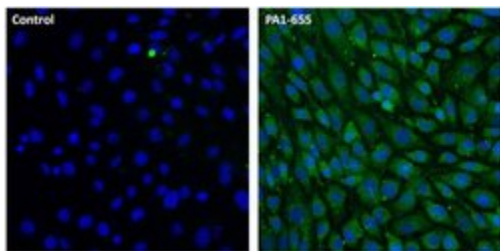
Fig. 4 HPbetaCD or HPgammaCD treatment induces LAMP-1 expression and causes a change in lysosomal positioning in NPC1 mutant cells. The healthy (wild-type) cells or NPC1 ^{-/-} cells treated with HPbetaCD or HPgammaCD for 72 h were lysed for immunoblotting (a , b) or stained for LAMP-1 (c). a The representative western blot and bar diagram of three experiments show that wild-type or NPC1 ^{-/-} cells treated with either HPbetaCD or HPgammaCD showed significantly higher levels of LAMP-1 expression (p < 0.001). The error bars shows mean +- S.E.M. of fold change calculated by densitometry analysis. b The representative western blot of three experiments shows that neither HPbetaCD nor HPgammaCD treatment changed expression of LAMP-2 or LAMP-3 in wild-type or NPC1 ^{-/-} cells. c Immunostaining micrographs show LAMP-1 (red, a lysosome marker) and DAPI (blue, a nucleus marker) staining. The arrow represents the distribution of LAMP-1 from the center of the nuclei. Data depict that the LAMP-1 protein is mostly confined to the area near the nuclear envelop in control NPC1 ^{-/-} cells, whereas it is distributed more widely throughout the cytoplasm when cells were treated with either HPbetaCD or HPgammaCD. Images are a representative of at least three random fields of three experimental replicates. Scale bar = 100 μm. d The LAMP-1 distribution per cell was quantified by measuring the area of fluorescence. Data are mean +- S.E.M. and representative of three experiments Cell treatment validation info.



Product Images For LAMP2 Polyclonal Antibody

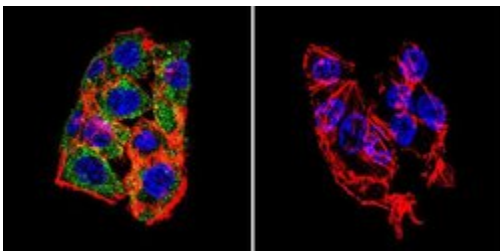
LAMP2 Antibody (PA1-655) in ICC/IF

Immunofluorescent analysis of LAMP-2 (green) in NIH/3T3 cells. Cells were fixed with 4% paraformaldehyde, permeabilized with 0.1% Triton X-100 in PBS, and blocked with 1% Blocker BSA (Product # 37525), each for 15 minutes at room temperature. Cells were stained with a LAMP-2 polyclonal antibody (Product # PA1-655) at a concentration of 20 μg/mL in 1% Blocker BSA in PBS (right panel), or incubated in blocking buffer alone as a negative control (left panel) overnight at 4C, and then incubated with a DyLight 488-conjugated goat anti-rabbit IgG secondary antibody (Product # 35552) at a dilution of 1:1000 for 1 hour at room temperature. Nuclei (blue) were stained with DAPI (Product # 46190). Images were taken on a Thermo Scientific ToxInsight Instrument at 20X magnification.



LAMP2 Antibody (PA1-655) in ICC/IF

Immunofluorescent analysis of LAMP2 in HepG2 Cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a LAMP2 polyclonal antibody (Product # PA1-655) at a dilution of 1:100 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35552). LAMP2 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



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Western Blot (15)

Molecular psychiatry

A CRHR1 antagonist prevents synaptic loss and memory deficits in a trauma-induced delirium-like syndrome.

"PA1-655 was used in Western Blotting to employ a thoracic trauma (TxT) mouse model and thoroughly analyzed age-dependent spatial and temporal posttraumatic alterations in the central nervous system."

Authors: Cursano S, Battaglia CR, Urrutia-Ruiz C, Grabrucker S, Schön M, Bockmann J, Braumüller S, Radermacher P, Roselli F, Huber-Lang M, Boeckers TM

Species
Mouse

Dilution
1:500

Year
2021

Frontiers in cell and developmental biology

The Lysosomal Membrane Protein Lamp2 Alleviates Lysosomal Cell Death by Promoting Autophagic Flux in Ischemic Cardiomyocytes.

"Published figure using LAMP2 polyclonal antibody (Product # PA1-655) in Western Blot"

Authors: Cui L, Zhao LP, Ye JY, Yang L, Huang Y, Jiang XP, Zhang Q, Jia JZ, Zhang DX, Huang Y

Species
Not Applicable

Dilution
Not Cited

Year
2020

[View more WB references on thermofisher.com](#)

Immunohistochemistry (4)

Cell death & disease

Rapamycin and fasting sustain autophagy response activated by ischemia/reperfusion injury and promote retinal ganglion cell survival.

"PA1-655 was used in Immunohistochemistry-immunofluorescence to analyse the autophagic response in the retinas of mice subjected to ischemia induced by transient elevation of intraocular pressure, reporting a biphasic and reperfusion time-dependent modulation of the process."

Authors: Russo R, Varano GP, Adornetto A, Nazio F, Tettamanti G, Girardello R, Cianfanelli V, Cavaliere F, Morrone LA, Corasaniti MT, Cecconi F, Bagetta G, Nucci C

Species
Mouse

Dilution
1:50

Year
2018

Scientific reports

High resolution structural evidence suggests the Sarcoplasmic Reticulum forms microdomains with Acidic Stores (lysosomes) in the heart.

"Published figure using LAMP2 polyclonal antibody (Product # PA1-655) in Immunofluorescence"

Authors: Aston D, Capel RA, Ford KL, Christian HC, Mirams GR, Rog-Zielinska EA, Kohl P, Galione A, Burton RA, Terrar DA

Species
Rabbit

Dilution
1:100

Year
2017

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More applications with references on thermofisher.com

- ICC/IF (8)
- Misc (1)

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