

# LAMP-2 antibody (pAb)

## Rabbit Anti-Human/Mouse Lysosome Associated Membrane Glycoprotein 2 (Autophagy Related Protein)

### Instruction Manual

Catalog Number	PK-AB718-3627
Synonyms	LAMP-2 Antibody: LAMP-2, Lysosome associated membrane protein 2
Description	Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components and is negatively regulated by TOR (Target of rapamycin). LAMP-2, a highly glycosylated protein associated with the lysosome, has recently been shown to be important in autophagy as mice deficient in this protein failed to convert autophagic vacuoles into vacuoles leading to impaired degradation of long-lived proteins. This correlates with the finding that human LAMP-2 deficiency causing Danon's disease is associated with the accumulation of autophagic material in striated myocytes. LAMP-2 exists in multiple isoforms.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal LAMP-2 antibody was raised against a 17 amino acid peptide from near the center of human LAMP-2 (Genbank accession No. NP_034815).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, ICC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. LAMP-2 antibody can be used for the detection of LAMP-2 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL.
Images	Available upon request.
References	Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. <i>Oncogene</i> . 2004; 23:2891-906. Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. <i>Carcinogenesis</i> 1993; 14:2501-5. Kamada Y, Funakoshi T, Shintani T, et al. Tor-mediated induction of autophagy via Apg1 protein kinase complex. <i>J. Cell. Biol.</i> 2000; 150:1507-13. Granger BL, Green SA, Gabel CA, et al. Characterization and cloning of the Igp110, a lysosomal glycoprotein from mouse and rat cells. <i>J. Biol. Chem.</i> 1990; 265:12036-43.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3627P HepG2 Cell Lysate, Cat. No. PK-AB718-1216 LAMP-1 Antibody, Cat. No. PK-AB718-3629 TOR Antibody, Cat. No. PK-AB718-3485

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