

# LAMP-1 antibody (pAb)

## Rabbit Anti-Human/Mouse/Rat Lysosome Associated Membrane Glycoprotein 1 (Autophagy Related Protein)

### Instruction Manual

Catalog Number	PK-AB718-3629
Synonyms	LAMP-1 Antibody: LAMP-1, Lysosome associated membrane protein 1
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). A protein recently found to be involved in autophagy, LAMP-2, is a highly glycosylated protein associated with the lysosome. LAMP-1 shares much homology to LAMP-2 and is thought to have overlapping functions. Mice lacking LAMP-1 had very minor defects compared to those deficient in LAMP-2 expression. However, the loss of both proteins resulted in embryonic lethality, suggesting that each protein possesses some unique and necessary functions.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal LAMP-1 antibody was raised against a 15 amino acid peptide from near the center of human LAMP-1 (Genbank accession No. NP_005552).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
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, IHC, IF <span style="float: right;">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.</span> LAMP-1 antibody can be used for the detection of LAMP-1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 20 µg/mL. For immunofluorescence start at 20 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. Chen JW, Murphy TL, Willingham MC, et al. Identification of two lysosomal membrane glycoproteins. <i>J. Cell Biol.</i> 1985; 101:85-95.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3629P EL4 Cell Lysate, Cat. No. PK-AB718-1287 LAMP-2 Antibody, Cat. No. PK-AB718-3627 TOR Antibody, Cat. No. PK-AB718-3485

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