Datasheet for 600-401-CH2

LAMP2 Antibody

Overview

Description:	Anti-LAMP2 (RABBIT) Antibody - 600-401-CH2
Item No.:	600-401-CH2
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	LAMP-2 Antibody, Mac3, LGP-B, CD107b, Lamp-2, Lamp II, Lamp-2a, Lamp-2b, Lamp-2c, Lysosome-associated membrane glycoprotein 2, CD107 antigen-like family member B, LAMP-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	LAMP2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-LAMP-2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide from near the C-terminus of human LAMP-2.
Purity/Specificity:	Anti-LAMP-2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. LAMP-2 antibody cross reacts with LAMP2B and LAMP2C, but not LAMP2A. Cross reactivity from other sources has not been determined.
Relevant Links:	• UniProtKB - P13473 • GeneID - 3920 • NCBI - NP_001116078.1

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-LAMP-2 Antibody has been tested for use in ELISA, Western Blotting, immunohistochemistry, and Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 47 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

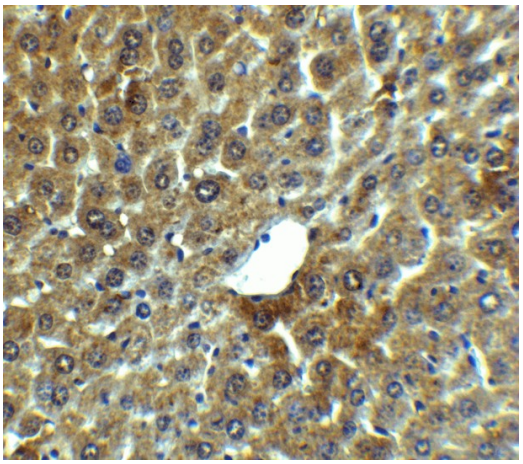
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

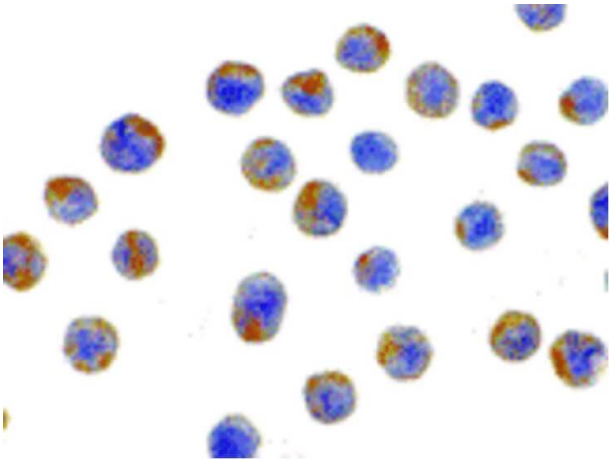
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

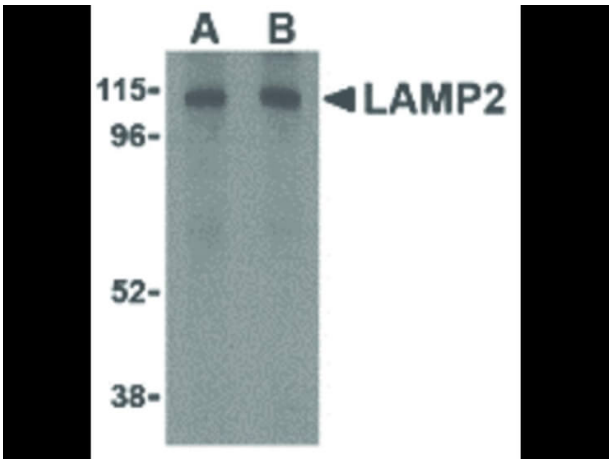
Images



Immunohistochemistry
Immunohistochemistry of LAMP-2 in mouse liver tissue with LAMP-2 Antibody at 5 µg/mL.



Immunohistochemistry
Immunocytochemistry of LAMP-2 antibody. Cell Type: HepG2 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: LAMP-2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: LAMP-2 is located in the cell membrane, endosome, and lysosome. Staining: LAMP-2 as precipitated brown signal with hematoxylin purple counterstain.



Western Blot

Western Blot of LAMP-2 antibody. Lane A: HepG2 cell lysate with LAMP-2 antibody at 1 µg/mL. Lane B: HepG2 cell lysate with LAMP-2 antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: LAMP-2 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 46 kDa, 114 kDa for LAMP-2.
Other band(s): LAMP-2 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.