Datasheet for 600-401-CH1

LAMP1 Antibody

Overview

Description:	Anti-LAMP1 (RABBIT) Antibody - 600-401-CH1
Item No.:	600-401-CH1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
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). 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.
Synonyms:	LAMP-1 Antibody, LAMPA, CD107a, LGP120, Lysosome-associated membrane glycoprotein 1, CD107 antigen-like family member A, LAMP-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	LAMP1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-LAMP-1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the internal region of human LAMP-1.
Purity/Specificity:	Anti-LAMP-1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with LAMP-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P11279 • GeneID - 3916 • NCBI - NP_005552

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-LAMP-1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 45 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
IF:	20 µg/mL
IHC:	20 µg/mL
WB:	1-2 µg/mL

Formulation

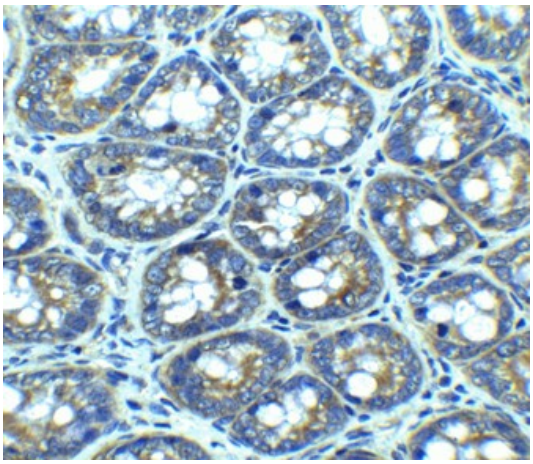
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

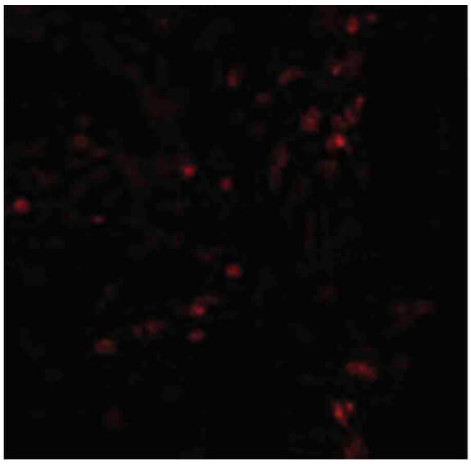
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

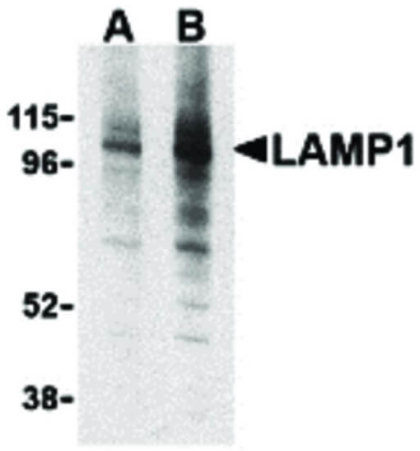
Images



Immunohistochemistry
Immunohistochemistry of LAMP-1 in rat colon tissue with LAMP-1 antibody at 2.5 µg/ml.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of LAMP-1 antibody. Cell Type: Human colon cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: LAMP-1 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: LAMP-1 is located in the cell membrane, endosome, and lysosome. Staining: LAMP-1 as red fluorescent signal.



Western Blot

Western Blot of LAMP-1 antibody. Lane A: EL4 cell lysate with LAMP-1 antibody at 1 µg/mL. Lane B: EL4 cell lysate with LAMP-1 antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: LAMP-1 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: 45 kDa, 96 kDa for LAMP-1. Other band(s): LAMP-1 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.