

Datasheet for 600-401-Y74**ATG101 Antibody****Overview**

Description:	Anti-ATG101 (RABBIT) Antibody - 600-401-Y74
Item No.:	600-401-Y74
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. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein ATG1. ATG101 is a recently discovered protein that stabilizes ATG13, another autophagy protein that forms a complex with the mammalian homologs of ATG1, ULK1 and ULK2, and with FIP200. This complex is a target of TOR phosphorylation under normal conditions; inhibition of TOR by rapamycin or leucine deprivation leads to dephosphorylation of ATG13, ULK1 and ULK2, which then leads to autophagy. ATG101 also interacts with ULK1 and is essential for autophagy.
Synonyms:	ATG101 Antibody, C12orf44, PP894, Autophagy-related protein 101
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG101
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ATG101 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide near the internal region of human ATG101.
Purity/Specificity:	Anti-ATG101 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ATG101 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9BSB4 • GeneID - 60673 • NCBI - NP_001092143

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ATG101 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 25 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:	5 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

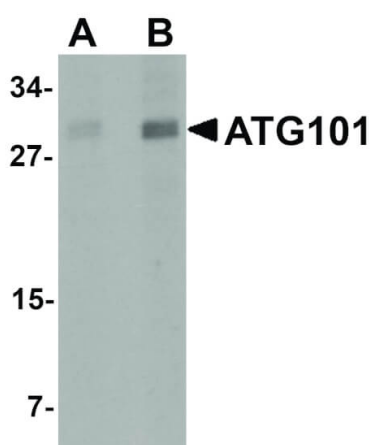
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

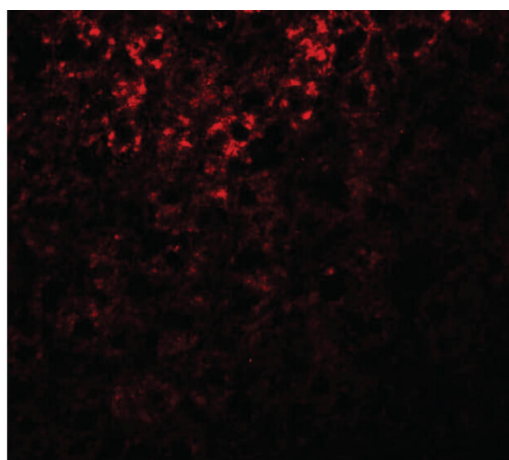
Expiration: Expiration date is one (1) year from date of receipt.

Images



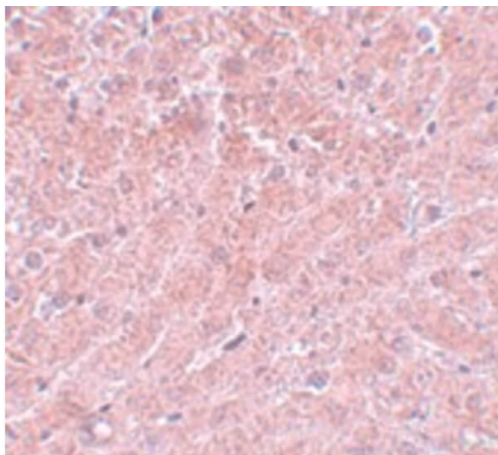
Western Blot

Western Blot of ATG101 antibody. Lane 1: Human liver tissue lysate with ATG101 antibody at 1 µg/mL. Lane 2: Human liver tissue lysate with ATG101 antibody at 2 µg/mL. 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: 25 kDa, 29 kDa for ATG101. Other band(s): ATG101 splice variants and isoforms.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of ATG101 antibody. Tissue: Mouse liver tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATG101 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATG101 is cytoplasmic. Staining: ATG101 as red fluorescent signal.

**Immunohistochemistry**

Immunohistochemistry of ATG101 antibody. Tissue: Mouse liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ATG101 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATG101 is cytoplasmic. Staining: ATG101 as precipitated pink signal with blue nuclear counterstain.

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.