

Datasheet for 600-401-Y83**ATG4B Antibody****Overview**

Description:	Anti-ATG4B (RABBIT) Antibody - 600-401-Y83
Item No.:	600-401-Y83
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 (1,2). ATG4B, also known as AUTL1, is one of four mammalian orthologs of the yeast ATG4 protein; all four are cysteine proteases (3). ATG4 is required for ATG8 conjugation to phosphatidylethanolamine on autophagosomal membranes. In mammals, each ATG4 homolog shows a selective preference for the ATG8 homologs (4). ATG4B has been found to be a novel protective protein in inflammatory colitis (5).
Synonyms:	Autophagy related 4B cysteine peptidase, APG4B, APG4-B, AUTL1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG4B
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ATG4B antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid peptide near the C-terminus of human ATG4B.

Purity/Specificity: Anti-ATG4B antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. ATG4B antibody is human, mouse and rat reactive. At least two isoforms of ATG4B are known to exist; this antibody will detect only the larger isoform. ATG4B is predicted to not cross-react with other ATG4 proteins.

Relevant Links:

- [UniProtKB - Q9Y4P1](#)
- [GeneID - 23192](#)
- [NCBI - NP_037457](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-ATG4B Antibody has been tested for use in ELISA, immunohistochemistry, immunofluorescence, and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 44 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

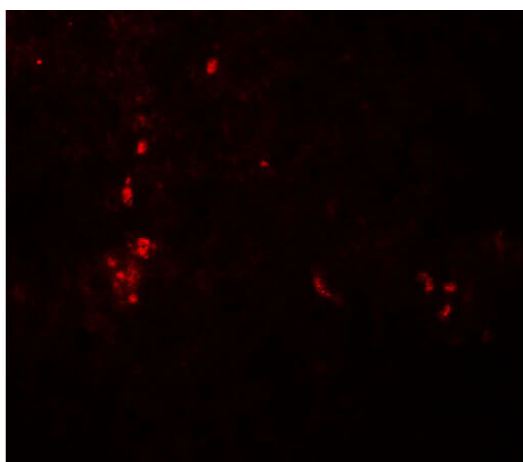
Shipping & Handling

Shipping Condition: Dry Ice

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.

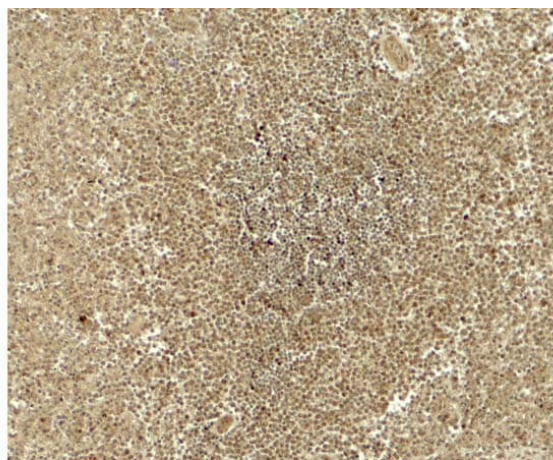
Expiration: Expiration date is one (1) year from date of receipt.

Images



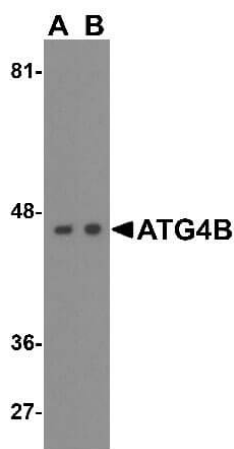
Immunofluorescence Microscopy

Immunofluorescence of ATG4B with 20µg/mL of Anti-ATG4B Antibody in human spleen tissue.



Immunohistochemistry

Immunohistochemistry of ATG4B with 5µg/mL of Anti-ATG4B in human spleen.

**Western Blot**

Western Blot Results of Anti-ATG4B Antibody.

Lane A: Ramos Cell lysates.

Lane B: Jurkat cell lysates.

Primary Antibody: ATG4B at 1 μ g/mL.

Expected MW: ~43kDa, Observed ~46kDa.

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.