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Datasheet for 600-401-Y87

ATG5 Antibody

Overview

Description:	Anti-ATG5 (RABBIT) Antibody - 600-401-Y87
Item No.:	600-401-Y87
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 APG1. ATG5, another member of the autophagy protein family, forms a conjugate with ATG12; this conjugate has a ubiquitin-protein ligase (E3)-like activity for protein lipidation in autophagy. This conjugate also associates with innate immune response proteins such as RIG-I and VISA (also known as IPS-1), inhibiting type I interferon production and permitting viral replication in host cells.
Synonyms:	ATG5 Antibody, ASP, APG5, APG5L, hAPG5, APG5-LIKE
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG5
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ATG5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the N-terminus of human ATG5.
Purity/Specificity:	Anti-ATG5 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Three isoforms of ATG5 are known to exist; this ATG5 antibody will only detect the longest isoform.
Relevant Links:	• UniProtKB - A9UGY9 • GeneID - 9474 • NCBI - EAW48415

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ATG5 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 32 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:	2.5 µg/mL
WB:	1 - 2 µg/mL

Formulation

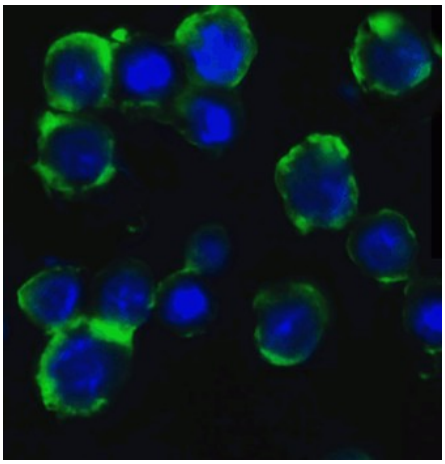
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

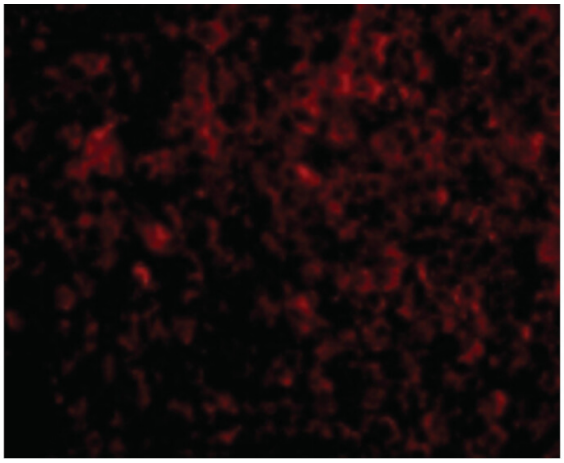
Shipping Condition:	Dry Ice

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.

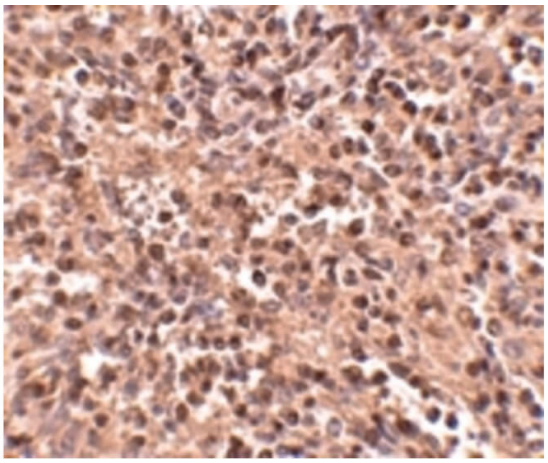
Images



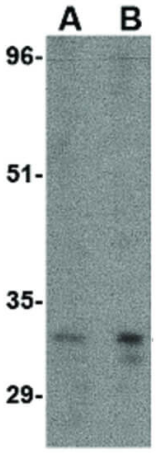
Immunofluorescence Microscopy
Immunofluorescence of ATG5 in Hela cells with ATG5 Antibody at 5 µg/ml.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of ATG5 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATG5 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. Staining: ATG5 as a red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of ATG5 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ATG5 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATG5 is nuclear and occasionally cytoplasmic. Staining: ATG5 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of ATG5 antibody. Lane A: Rat spleen tissue lysate at 1 µg/mL. Lane B: Rat spleen tissue lysate at 2 µg/mL. . Load: 35 µg per lane. 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: 32.4 kDa, ~32 kDa for ATG5.

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.