

Datasheet for 600-401-Y38**APG7 Antibody****Overview**

Description:	Anti-APG7 (RABBIT) Antibody - 600-401-Y38
Item No.:	600-401-Y38
Size:	100 µg
Applications:	ELISA, IF, 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. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein APG1. Another member of the autophagy family of proteins is APG7 which was identified in yeast as a ubiquitin-E1-like enzyme; this function is conserved in the mammalian homolog. In mammalian cells, APG7 is essential for autophagy conjugation systems, autophagosome formation, starvation-induced bulk degradation of proteins and organelles. It has been suggested that caspase-8 may alter APG7 levels and thus the APG7 program of autophagic cell death.
Synonyms:	APG7 Antibody, GSA7, APG7L, APG7-LIKE, Ubiquitin-like modifier-activating enzyme ATG7, ATG12-activating enzyme E1 ATG7, APG7-like
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG7
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-APG7 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide from near the N-terminus of human APG7.
Purity/Specificity:	Anti-APG7 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with APG7 from other sources has not been determined.
Relevant Links:	• UniProtKB - O95352 • GeneID - 10533 • NCBI - NP_006386

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-APG7 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 78 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:	1:5000 - 1:20,000
IF:	20 µg/mL
WB:	0.5 - 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

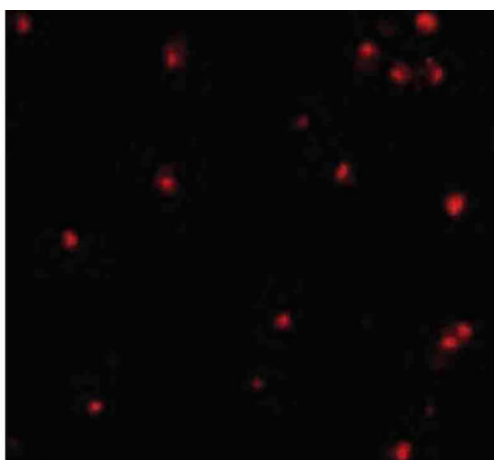
Shipping & Handling

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.

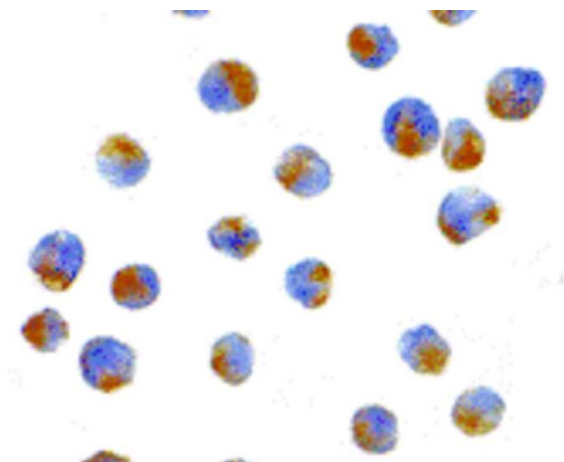
Expiration: Expiration date is one (1) year from date of receipt.

Images



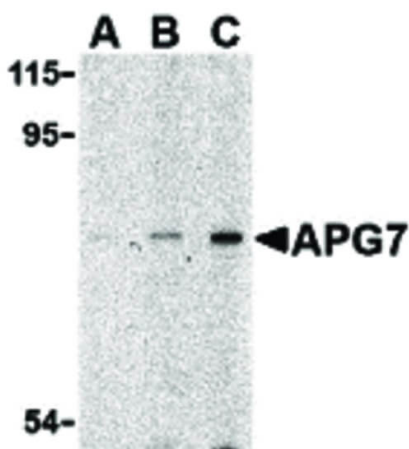
Immunofluorescence Microscopy

Immunofluorescence Microscopy of APG7 antibody. Cell Type: L1210 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: APG7 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: APG7 is cytoplasmic. Staining: APG7 as red fluorescent signal.



Immunohistochemistry

Immunocytochemistry of APG7 antibody. Cell Type: L1210 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: APG7 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: APG7 is cytoplasmic. Staining: APG7 is stained with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of APG7 antibody in L1210 cell lysate. Lane A: APG7 antibody at 1 $\mu\text{g/mL}$. Lane B: APG7 antibody at 2 $\mu\text{g/mL}$. Lane C: APG7 antibody at 4 $\mu\text{g/mL}$. Load: 35 μg per lane. Primary antibody: APG7 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: 78 kDa, 80 kDa for APG7. Other band(s): APG7 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.