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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

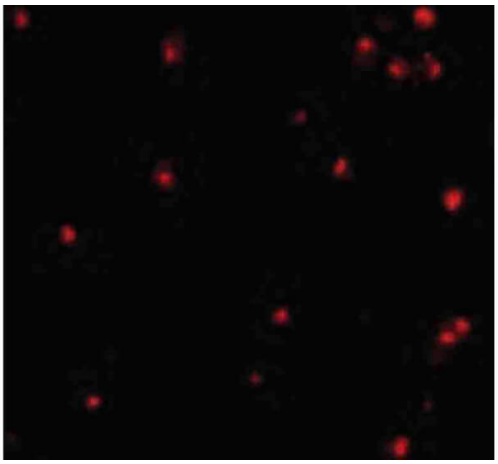
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

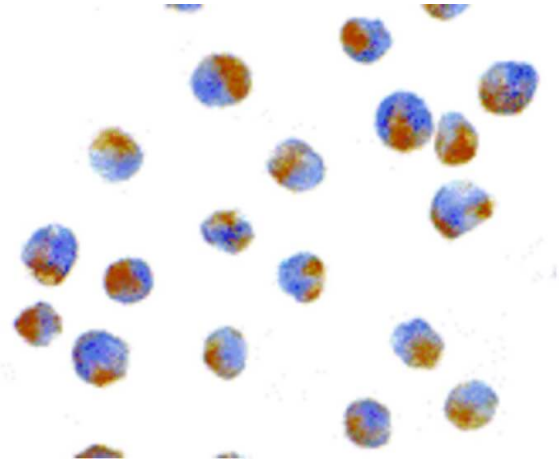
Shipping Condition:	Dry Ice

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.

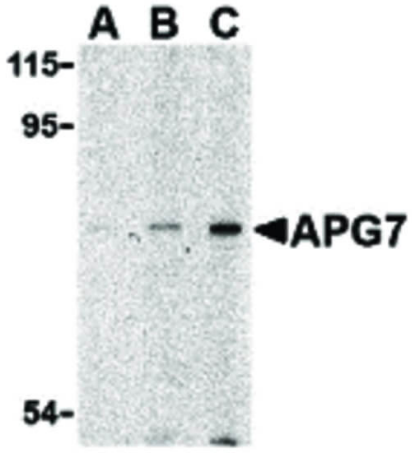
Images



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 µg/mL. Lane B: APG7 antibody at 2 µg/mL. Lane C: APG7 antibody at 4 µg/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.

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