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Datasheet for 600-401-Y79

ATG16 Antibody

Overview

Description:	Anti-ATG16 (RABBIT) Antibody - 600-401-Y79
Item No.:	600-401-Y79
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. ATG16, another member of the autophagy protein family, forms a complex with the ATG5-ATG12 conjugate. This multimeric protein has been shown to be essential for autophagosome formation in both yeast and mammals and targets the ATG5-ATG12 complex to the autophagic isolation membrane during the formation of the autophagosome. Because mammalian ATG16 has seven WD-repeats in its C-terminal domain, it has been suggested that these may form a platform for further protein-protein interactions. Multiple isoforms of ATG16 are known to exist.
Synonyms:	ATG16 Antibody, IBD10, WDR30, APG16L, ATG16A, ATG16L, UNQ9393/PRO34307, Autophagy-related protein 16-1, APG16-like 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG16L1
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ATG16 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the internal region of human ATG16.
Purity/Specificity:	Anti-ATG16 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ATG16 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q676U5 • GeneID - 55054 • NCBI - NP_110430

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ATG16 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 68 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:	1:2500 - 1:5000
IF:	4 µg/mL
WB:	0.25-0.5 µg/mL

Formulation

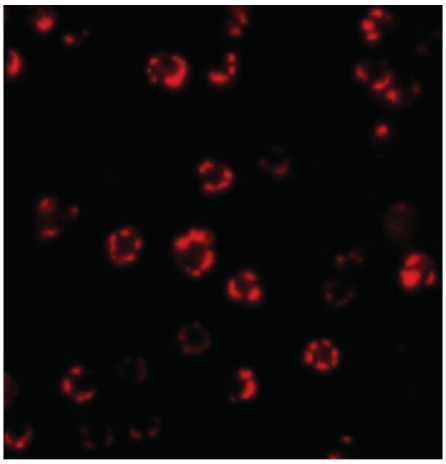
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

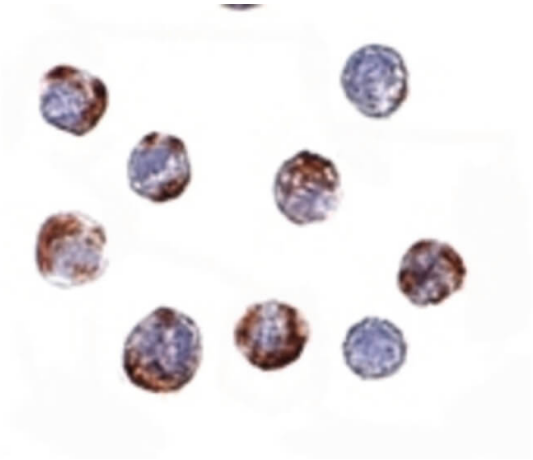
Shipping Condition:	Dry Ice

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.

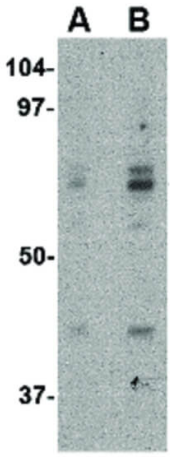
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of ATG16 antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATG16 antibody at 4 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: ATG16 as a red fluorescent signal.



Immunocytochemistry
Immunocytochemistry of ATG16 antibody. Tissue: HeLa cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ATG16 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATG16 is nuclear and occasionally cytoplasmic. Staining: ATG16 as precipitated brown signal with hematoxylin purple counterstain.



Western Blot

Western Blot of ATG16 antibody. Lane A: HeLa cell lysate at 0.25 µg/mL. Lane B: HeLa cell lysate at 0.5 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: 68.2 kDa, ~70 kDa for ATG16. Other band(s): ATG16 splice variants and isoforms.

Disclaimer

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