Datasheet for 600-401-487

APG7 Antibody

Overview

Description:	Anti-APG7 (RABBIT) Antibody - 600-401-487
Item No.:	600-401-487
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Apg7 is the human gene product similar in homology to Pichia pastoris GSA7 and Saccharomyces cerevisiae Apg7. In the yeast, the protein appears to be required for fusion of peroxisomal and vacuolar membranes. The protein shows homology to the ATP-binding and catalytic sites of the E1 ubiquitin activating enzymes.
Synonyms:	rabbit anti-APG7 Antibody, APG-7, APG 7, APG7 autophagy 7-like antibody, APG7 like antibody, APG7L antibody, ATG 7 antibody, ATG-7 antibody, ATG7 autophagy related 7 homolog antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG7
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 550-575 of Human Apg7 protein.

Purity/Specificity:	This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human Apg7 protein. However, BLAST analysis indicates 100% homology (12/12) for this protein from human, chimpanzee, mouse, rat, dog, and chicken sources. The core amino acids of the immunogen, G-D-S-T-R-D-R-T are 100% identical (8/8) in D. melanogaster. Reactivity with Apg7 proteins from other sources is not known.
Relevant Links:	• UniProtKB - O95352 • NCBI - NP_001129503.2 • GeneID - 10533

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 78 kDa in size corresponding to human Apg7 by western blotting in the appropriate cell lysate or extract. Human Apg7 has been reported to form a homodimer at approximately 160 kDa.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:300,000 - 1:400,000
IF:	User Optimized
WB:	1:500 - 1:2,000

Formulation

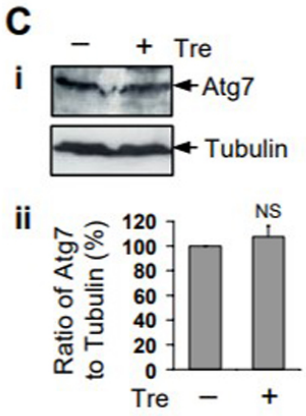
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

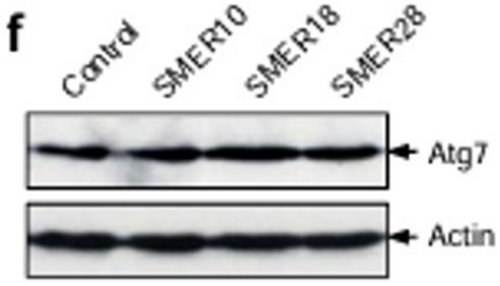
Shipping Condition:	Dry Ice

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.

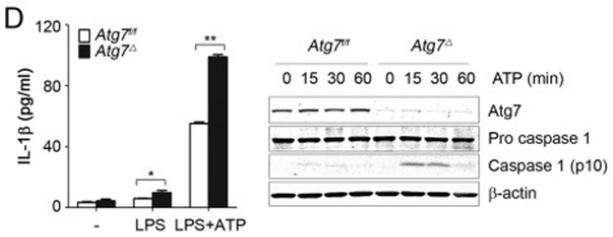
Images



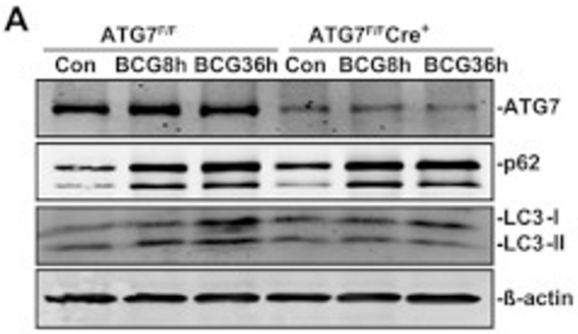
Western Blot
(C) HeLa cells treated with or without 100mM trehalose for 24h were analyzed for Atg7 levels by immunoblotting with anti-Atg7 (p/n 600-401-487) antibody (i) and densitometry analysis relative to Tubulin (ii). p=0.4315. Fig. S5.
PMID: 17182613



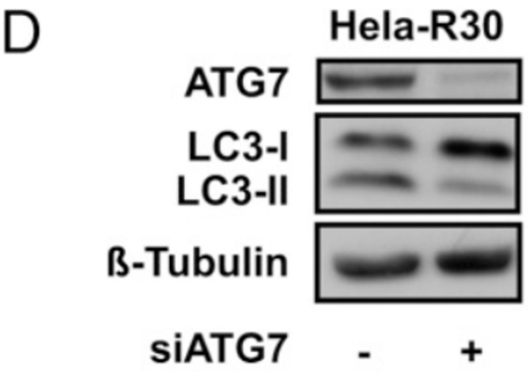
Western Blot
The effect of SMERs10, 18 and 28 on mTOR activity, Beclin-1/Atg6, Atg5, Atg7, Atg12, Atg5-Atg12 conjugation and proteasome activity. (f) HeLa cells treated with DMSO (control) or with 47 µMSMER10, 43 µMSMER18 or 47 µMSMER28 for 24 h, were analyzed for Atg7 (f) levels by immunoblotting with anti-Atg7 (p/n 600-401-487) antibodies. Supplementary Figure 3. PMID: 17486044



Western Blot
D, BMDM from Atg7f/f or Atg7Δ mice were left untreated, primed with LPS, or primed with LPS and then treated with ATP (5 mm) for 30 min (left panel) or 0–60 min (right panel). Fig 1. PMID: 24178293



Western Blot
ALIS formation and clearance are independent of ATG7. BMMs from wild type (ATG7F/F) or ATG7 knock-out (ATG7F/FCre+) mice were infected with BCG for 1 h followed by culture in regular medium for 7 h (BCG8h) or 35 h (BCG36h). In some experiments, BMMs were infected with BCG for 1 h followed by culture in regular medium for 7 h and then treated for 4 h with 25 µm cycloheximide either with or without 200 nm of bafilomycin A. Cell lysates were subjected to immunoblot analysis using antibodies against ATG7, p62, LC3B, or β-actin (A). Fig 5. PMID: 22518844



Western Blot
(D) Whole cell lysates of Hela-R30 cells were collected 48 h after transfection of siRNA targeted against ATG7 (siATG7) or non-targeted siControl and immunoblotted for ATG7, LC3 or β-tubulin. Greater than 80% knockdown was achieved with siATG7 when compared with siControl. LC3-I accumulation was noted in cells with ATG7 knockdown. Fig 4. PMID: 22954701

References

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