

Atg7 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI14349

Specification

Atg7 Antibody - C-terminal region - Product Information

Application	WB
Primary Accession	Q641Y5
Other Accession	NM_001012097 , NP_001012097
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76kDa KDa

Atg7 Antibody - C-terminal region - Additional Information

Gene ID 312647

Alias Symbol [Apg7l](#)

Other Names

Ubiquitin-like modifier-activating enzyme ATG7, ATG12-activating enzyme E1 ATG7, Autophagy-related protein 7, APG7-like, Atg7, Apg7l

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-Atg7 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Atg7 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Atg7 Antibody - C-terminal region - Protein Information

Name Atg7 {ECO:0000312|RGD:1304817}

Synonyms Apg7l

Function

E1-like activating enzyme involved in the 2 ubiquitin-like systems required for cytoplasm to vacuole transport (Cvt) and autophagy. Activates ATG12 for its conjugation with ATG5 as well as the ATG8 family proteins for their conjugation with phosphatidylethanolamine. Both systems are needed for the ATG8 association to Cvt vesicles and autophagosomes membranes. Required for

autophagic death induced by caspase-8 inhibition. Facilitates LC3-I lipidation with phosphatidylethanolamine to form LC3-II which is found on autophagosomal membranes (By similarity). Required for mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Modulates p53/TP53 activity to regulate cell cycle and survival during metabolic stress. Also plays a key role in the maintenance of axonal homeostasis, the prevention of axonal degeneration, the maintenance of hematopoietic stem cells, the formation of Paneth cell granules, as well as in adipose differentiation (By similarity). Plays a role in regulating the liver clock and glucose metabolism by mediating the autophagic degradation of CRY1 (clock repressor) in a time-dependent manner (By similarity).

Cellular Location

Cytoplasm. Preautophagosomal structure. Note=Also localizes to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme

Tissue Location

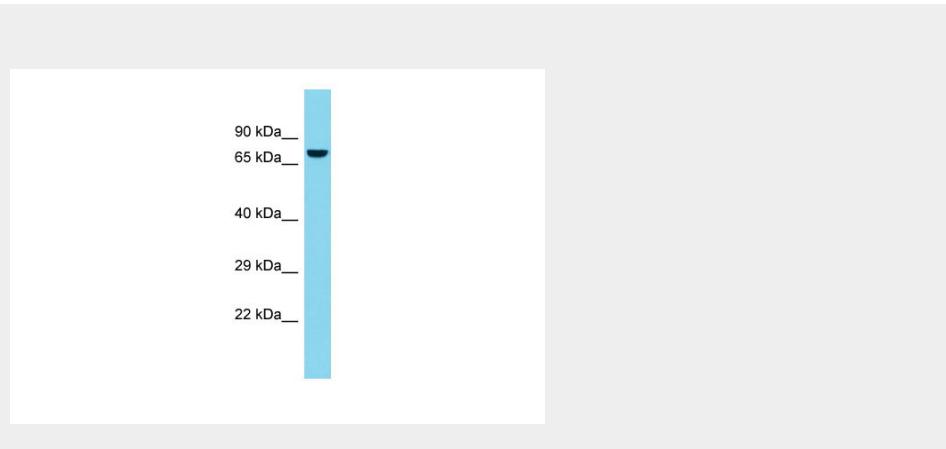
Widely expressed..

Atg7 Antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Atg7 Antibody - C-terminal region - Images



Host: Rabbit

Target Name: Atg7

Sample Tissue: Rat Thymus lysates

Antibody Dilution: 1.0µg/ml

Atg7 Antibody - C-terminal region - References

Tanida I., et al. Biochem. Biophys. Res. Commun. 292:256-262(2002).