

ATG3 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1807b

Specification

ATG3 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q9NT62
Other Accession	Q6AZ50 , Q9CPX6 , Q0VCL3
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Antigen Region	83-112

ATG3 Antibody (C-term) - Additional Information

Gene ID 64422

Other Names

Ubiquitin-like-conjugating enzyme ATG3,
632-, Autophagy-related protein 3,
APG3-like, hApg3, Protein PC3-96, ATG3,
APG3, APG3L

Target/Specificity

This ATG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 83-112 amino acids from the C-terminal region of human ATG3.

Dilution

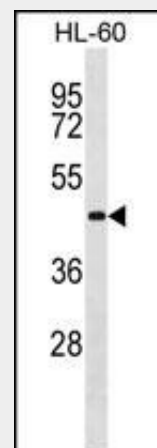
WB~1:1000

Format

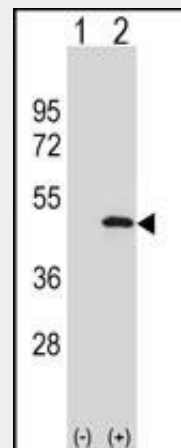
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



APG3L Antibody (I98) (Cat. #AP1807b) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the APG3L antibody detected the APG3L protein (arrow).



Western blot analysis of APG3L (arrow) using rabbit polyclonal APG3L Antibody (I98) (Cat. #AP1807b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the APG3L gene.

ATG3 Antibody (C-term) - Background

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active

Precautions

ATG3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATG3 Antibody (C-term) - Protein Information

Name ATG3

Synonyms APG3, APG3L

Function

E2 conjugating enzyme required for the cytoplasm to vacuole transport (Cvt), autophagy, and mitochondrial homeostasis. Responsible for the E2-like covalent binding of phosphatidylethanolamine to the C-terminal Gly of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A). The ATG12-ATG5 conjugate plays a role of an E3 and promotes the transfer of ATG8-like proteins from ATG3 to phosphatidylethanolamine (PE). This step is required for the membrane association of ATG8-like proteins. The formation of the ATG8- phosphatidylethanolamine conjugates is essential for autophagy and for the cytoplasm to vacuole transport (Cvt). Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3. Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway.

Cellular Location

Cytoplasm.

Tissue Location

Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta

cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole).

APG3L is an E2-like conjugating enzyme facilitating covalent binding of APG8 (MAP1LC3) to phosphatidylethanolamine (PE). APG7 (an E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with APG3. Formation of the PE conjugate is essential for autophagy.

ATG3 Antibody (C-term) - References

Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005)
Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005)
Greenberg JT. Dev Cell. 8(6):799-801. (2005)
Levine B. Cell. 120(2):159-62. (2005)
Shintani T and Klionsky DJ. Science. 306(5698):990-5. (2004)

ATG3 Antibody (C-term) - 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](#)