

**ATG10 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1815a****Specification**

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**ATG10 Antibody (N-term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | IHC-P,E                |
| Primary Accession | <a href="#">Q9H0Y0</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Antigen Region    | 15-45                  |

**ATG10 Antibody (N-term) - Additional Information****Gene ID** 83734**Other Names**

Ubiquitin-like-conjugating enzyme ATG10, 632-, Autophagy-related protein 10, APG10-like, ATG10, APG10L

**Target/Specificity**

This ATG10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15~45 amino acids from the N-term of human APG10L.

**Dilution**

IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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.

**Precautions**

ATG10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ATG10 Antibody (N-term) - Protein Information****Name** ATG10**Synonyms** APG10L

**Function** E2-like enzyme involved in autophagy. Acts as an E2-like enzyme that catalyzes the conjugation of ATG12 to ATG5. ATG12 conjugation to ATG5 is required for autophagy. Likely serves as an ATG5-recognition molecule. Not involved in ATG12 conjugation to ATG3 (By similarity). Plays a role in adenovirus-mediated cell lysis.

**Cellular Location**

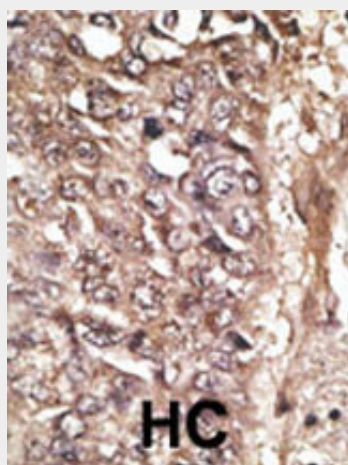
Cytoplasm.

**ATG10 Antibody (N-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](#)

**ATG10 Antibody (N-term) - Images**



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

**ATG10 Antibody (N-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 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).

APG10 is an ATG12-conjugating enzyme (E2-like enzyme) that likely serves as an ATG5-recognition

molecule. This protein interacts with MAP1LC3A. By interacting with MAP1LC3A, it plays a role in the conjugation of ATG12 to ATG5. APG10 also is able to directly interact either with ATG5 or ATG7.

#### **ATG10 Antibody (N-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)

#### **ATG10 Antibody (N-term) - Citations**

- [Activation of autophagy in mesenchymal stem cells provides tumor stromal support.](#)