

**ATG10 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP1815a****Specification**

---

**ATG10 Antibody (N-term) Blocking peptide - Product Information**Primary Accession [Q9H0Y0](#)**ATG10 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 83734**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1815a](/product/products/AP1815a) was selected from the N-term region of human Autophagy APG10L. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ATG10 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **ATG10 Antibody (N-term) Blocking peptide - Images**

## **ATG10 Antibody (N-term) Blocking peptide - 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) Blocking peptide - 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)