

ATG5 Antibody
Rabbit mAb
Catalog # AP90767

Specification

ATG5 Antibody - Product Information

Application **WB, IHC, ICC, IP**
Primary Accession [O9H1Y0](#)
Reactivity **Rat**
Clonality **Monoclonal**

Other Names

APG 5L; APG5; APG5 autophagy 5 like; APG5 like; APG5-like; Apoptosis specific protein; ASP; ATG 5; ATG5 autophagy related 5 homolog; Autophagy protein 5; hAPG5;

Isotype **Rabbit IgG**
Host **Rabbit**
Calculated MW **32447 Da**

ATG5 Antibody - Additional Information

Purification **Affinity-chromatography**
Immunogen **A synthesized peptide derived from human ATG5**
Description **Required for autophagy. Conjugates to ATG12 and associates with isolation membrane to form cup-shaped isolation membrane and autophagosome. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity.**
Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

ATG5 Antibody - Protein Information

Name ATG5 ([HGNC:589](#))

Synonyms APG5L, ASP

Function

Involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugating system involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3- like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity. Plays a critical role in multiple aspects of lymphocyte development and is

essential for both B and T lymphocyte survival and proliferation. Required for optimal processing and presentation of antigens for MHC II. Involved in the maintenance of axon morphology and membrane structures, as well as in normal adipocyte differentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradation of IFT20 via the autophagic pathway. As part of the ATG8 conjugation system with ATG12 and ATG16L1, required for recruitment of LRRK2 to stressed lysosomes and induction of LRRK2 kinase activity in response to lysosomal stress (By similarity).

Cellular Location

Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein
Note=Colocalizes with nonmuscle actin. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (By similarity). Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

Tissue Location

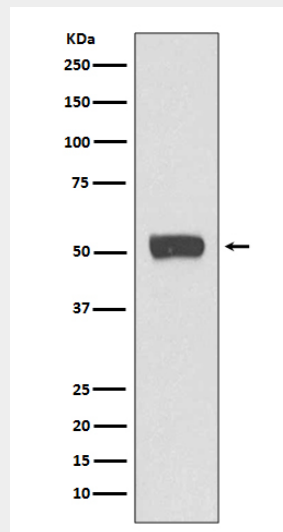
Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells

ATG5 Antibody - 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](#)

ATG5 Antibody - Images



Western blot analysis of ATG5 expression in Raji cell lysate.