

ATG5 Antibody

Rabbit mAb Catalog # AP90767

Specification

ATG5 Antibody - Product Information

Application WB, IHC, ICC, IP

Primary Accession
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

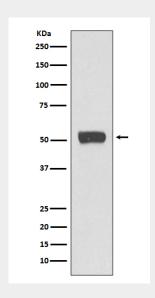
Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells

ATG5 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATG5 Antibody - Images



Western blot analysis of ATG5 expression in Raji cell lysate.