10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

APG5L (ATG5) Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5079

Specification

APG5L (ATG5) Antibody - Product Information

Application	**WB,E**
Primary Accession	Q9H1Y0
Other Accession	Q3MQ04, Q3MQ24
Reactivity	**Human, Mouse, Rat**
Predicted	**Pig, Bovine**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=32,23;M=32;Rat=25 KDa**
Isotype	**IgG1,κ**
Antigen Source	**HUMAN**

APG5L (ATG5) Antibody - Additional Information

Gene ID 9474

Other Names
Autophagy protein 5, APG5-like, Apoptosis-specific protein, ATG5, APG5L, ASP

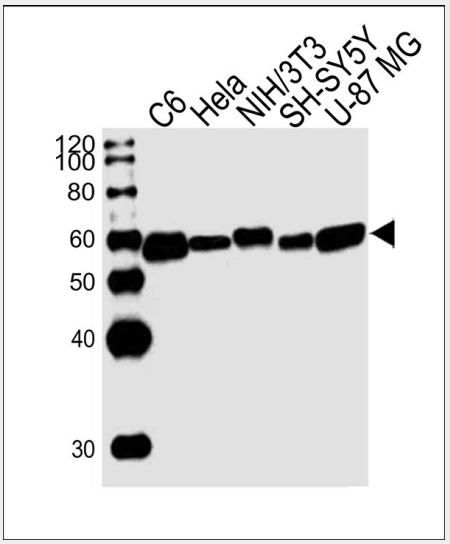
Dilution
WB~~1:1000

Target/Specificity
This ATG5 antibody is generated from a mouse immunized with a recombination protein from the human region of human ATG5.

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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
APG5L (ATG5) Antibody is for research use



Western blot analysis of lysates from rat C6,Hela,mouse NIH/3T3,SH-SY5Y,U-87 MG cell line (from left to right), using ATG5 Antibody(Cat. #AW5079). AW5079 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

APG5L (ATG5) Antibody - Background

Involved in autophagy vesicles formation. Conjugation with ATG12 through an 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. The ATG12-ATG5 conjugate also regulates negatively the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Plays also a role in translation or delivery of incoming viral RNA to the translation

only and not for use in diagnostic or therapeutic procedures.

APG5L (ATG5) Antibody - Protein Information

Name ATG5

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.

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

APG5L (ATG5) Antibody - Protocols

apparatus. HCV utilizes ATG5 as a proviral factor during the onset of viral infection. 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.

APG5L (ATG5) Antibody - References

Hammond E.M.,et al.FEBS Lett. 425:391-395(1998).
Chen Y.,et al.Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Mungall A.J.,et al.Nature 425:805-811(2003).
Grand R.J.A.,et al.Exp. Cell Res. 218:439-451(1995).

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture