

ATG5 Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF2828a**Specification**

ATG5 Antibody (internal region) - Product Information

Application	E
Primary Accession	Q9H1Y0
Other Accession	NP_004840.1 , 9474 , 11793 (mouse)
Predicted	Human, Mouse, Horse
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	32447

ATG5 Antibody (internal region) - Additional Information**Gene ID** 9474**Other Names**

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

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ATG5 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ATG5 Antibody (internal region) - 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). Also localizes to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme. Under starved conditions, the ATG12-ATG5-ATG16L1 complex is translocated to phagophores driven by RAB33B (PubMed:32960676). {ECO:0000250, ECO:0000269|PubMed:32960676}

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 (internal region) - 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 (internal region) - Images

ATG5 Antibody (internal region) - References

Autophagic machinery activated by dengue virus enhances virus replication. Lee YR, Lei HY, Liu MT, Wang JR, Chen SH, Jiang-Shieh YF, Lin YS, Yeh TM, Liu CC, Liu HS. Virology. 2008 May 10;374(2):240-8. Epub 2008 Mar 18. PMID: 18353420