

**ARG59284**  
anti-ATG5 antibodyPackage: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes ATG5
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATG5
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-275 of Human ATG5 (NP_004840.1).
Conjugation	Un-conjugated
Alternate Names	ASP; APG5L; APG5-LIKE; APG5; APG5-like; hAPG5; Apoptosis-specific protein; Autophagy protein 5

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa, NIH/3T3, THP-1, PC-12 and Rat brain	
Observed Size	58 kDa	

### Properties

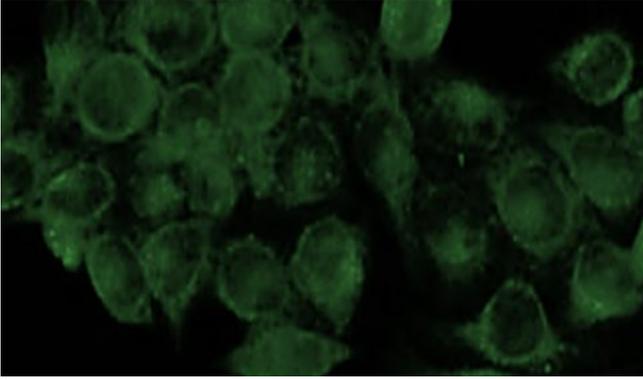
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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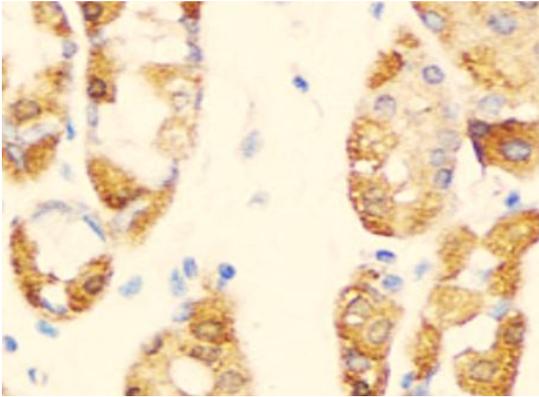
Gene Symbol	ATG5
Gene Full Name	autophagy related 5
Background	The protein encoded by this gene, in combination with autophagy protein 12, functions as an E1-like activating enzyme in a ubiquitin-like conjugating system. The encoded protein is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. Several transcript variants encoding different protein isoforms have been found for this gene. [provided by RefSeq, Sep 2015]
Function	<p>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. The ATG12-ATG5 conjugate also negatively regulates the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Also plays a role in translation or delivery of incoming viral RNA to the translation apparatus. 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.</p> <p>May play an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity. Plays a crucial role in IFN-gamma-induced autophagic cell death by interacting with FADD. [UniProt]</p>
Calculated Mw	32 kDa
PTM	<p>Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane.</p> <p>Acetylated by EP300. [UniProt]</p>
Cellular Localization	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. [UniProt]



ARG59284 anti-ATG5 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG59284 anti-ATG5 antibody (green) at 1:100 dilution. Blue: DAPI for nuclear staining.

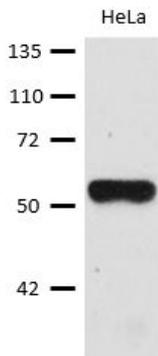
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ARG59284 anti-ATG5 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach stained with ARG59284 anti-ATG5 antibody at 1:150 dilution (40x lens).

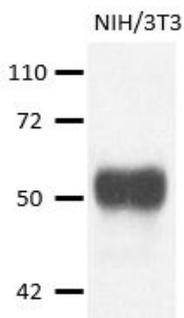
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ARG59284 anti-ATG5 antibody WB image

Western blot: 25 µg of HeLa cell lysates stained with ARG59284 anti-ATG5 antibody at 1:1000 dilution.

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ARG59284 anti-ATG5 antibody WB image

Western blot: 25 µg of NIH/3T3 cell lysates stained with ARG59284 anti-ATG5 antibody at 1:1000 dilution.

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