

Rabbit antibody to ATG5: whole serum

Catalogue No.:	R-111-100
Description:	FUNCTION: Required for autophagy. Conjugates to ATG12 and associates with isolation membrane to form cup-shaped isolation membrane and autophagosome. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed. FUNCTION: 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. SUBCELLULAR LOCATION: Cytoplasm. Colocalizes with nonmuscle actin. ALTERNATIVE PRODUCTS: 2 named isoforms produced by alternative splicing. TISSUE SPECIFICITY: Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells. INDUCTION: By apoptotic stimuli. PTM: Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane. SIMILARITY: Belongs to the ATG5 family.
Batch No.:	See product label
Unit size:	100 uL
Antigen:	A synthetic peptide corresponding to the C-terminal of human ATG-5L. No immunogenic carrier protein was conjugated to the immunogen. Instead, Adjuvane B has been used to orchestrate/boost the immune response.
Other Names:	Autophagy protein 5; APG5-like; APG 5; Apoptosis-specific protein; APG5; ATG5; APG5L; ASP
Accession:	ATG5_HUMAN
Produced in:	Rabbit
Purity:	Whole serum
Applications:	IHC, immunofluorescence, WB. A dilution of 1:200 to 1:1000 dilution is recommended for these applications. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	IHC and WB confirmed the specificity for ATG5.
Cross-reactivity:	Human, not yet tested in other species.
Form:	Lyophilised
Reconstitution:	Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Expiry Date:	12 months after purchase
Specific References:	<ol style="list-style-type: none">1. E.N. Wilson et al (2011) A Switch Between Cytoprotective and Cytotoxic Autophagy in the Radiosensitization of Breast Tumor Cells by Chloroquine and Vitamin D. <i>Horm Cancer</i>. 2011 Sep 2.2. Bristol ML et al (2012) Dual functions of autophagy in the response of breast tumor cells to radiation: cytoprotective autophagy with radiation alone and cytotoxic autophagy in

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radiosensitization by vitamin D 3.

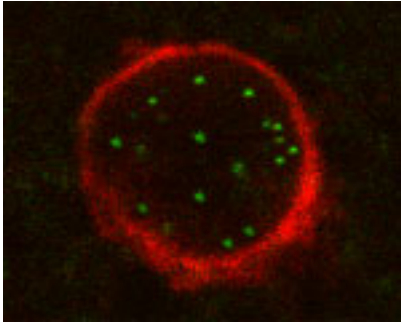
Autophagy. 2012 May 1;8(5):739-53.

3. Guido C et al (2012) Metabolic reprogramming of cancer-associated fibroblasts by TGF- β drives tumor growth: connecting TGF- β signaling with "Warburg-like" cancer metabolism and L-lactate production.

Cell Cycle. 2012 Aug 15;11(16):3019-35.

References:

1. Mizushima, N et al. (2003) Int J Biochem Cell Biol. 35(5), 553-61
2. Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005)
3. Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005)
4. Greenberg JT. Dev Cell. 8(6):799-801. (2005)



Confocal microscopy on stained ATG5 using Rabbit antibody to ATG5: whole serum (R-111-100) in paraffin-embedded human brain section (midfrontal cortex, Alzheimer case). ATG5 appears green. Red staining is p25.

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