



Rabbit antibody to ATG5: whole serum

Catalogue No.:	R-111-100
Description:	<p>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.</p>
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. Horm Cancer. 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.

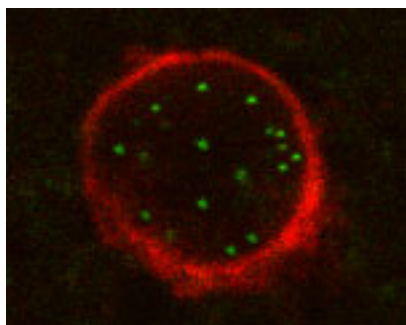
Autophagy. 2012 May 1;8(5):739-53.

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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