

Rabbit antibody to ATG5: IgG

Catalogue No.:	R-138-500
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:	500 µg
Antigen:	A synthetic peptide corresponding to the C-terminal of human ATG-5L. No immunogenic carrier protein was conjugated to the immunogen. Instead, Adjukine B (see the Adjuvants in biosensis' product list) has been used to orchestrate/boost the immune response.
Other Names:	Autophagy protein 5; APG5-like; APG 5; APG5; Apoptosis-specific protein; ATG5; APG5L; ASP
Accession:	ATG5_HUMAN
Produced in:	Rabbit
Purity:	Protein G purified IgG
Applications:	IHC, immunofluorescence, WB (band at 49kDa) . 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 500 μ l of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20°C for a higher stability, and at 4°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Expiry Date:	Six months after purchase
Specific References:	 Garrido-Maraver J. et al (2012) Screening of effective pharmacological treatments for MELAS syndrome using yeasts, fibroblasts and cybrids models of the disease Br J Pharmacol. 2012 Jul 2. De la Mata M. et al (2012) Recovery of MERRF fibroblasts and cybrids pathophysiology by Coenzyme Q₁₀

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Neurotherapeutics. 2012 Apr;9(2):446-63.

3. Cotán D. et al. (2011) Secondary coenzyme Q10 deficiency triggers mitochondria degradation by mitophagy in MELAS fibroblasts FASEB J. 2011

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)



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