

## Rabbit antibody to ATG3: whole serum

<b>Catalogue No.:</b>	R-159-100
<b>Description:</b>	<b>FUNCTION:</b> GABARAPL1 (GABARAPL2 or GABARAP or MAP1LC3)-modifier protein conjugating enzyme involved in its E2-like covalent binding to PE. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3 (E2-like enzyme). Preferred substrate is MAP1LC3A. Formation of the GABARAPL1-PE conjugate is essential for autophagy. <b>SUBUNIT:</b> Interacts with ATG7 and ATG12. The complex, composed of ATG3 and ATG7, plays a role in the conjugation of ATG12 to ATG5. <b>SUBCELLULAR LOCATION:</b> Cytoplasm. <b>ALTERNATIVE PRODUCTS:</b> 2 named isoforms produced by alternative splicing. <b>TISSUE SPECIFICITY:</b> Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta. <b>SIMILARITY:</b> Belongs to the ATG3 family.
<b>Batch No.:</b>	See product label
<b>Unit size:</b>	100 uL
<b>Antigen:</b>	A synthetic peptide corresponding to a central region of the human ATG3 protein conjugated to Blue Carrier Protein has been used as the immunogen. The peptide is homologous with the corresponding sequence derived from ATG3 protein in mouse, rat, <i>S. cerevisiae</i> , <i>Macaca mulatta</i> (monkey) and <i>Canis familiaris</i> (dog).
<b>Other Names:</b>	Autophagy-related protein 3; APG3; APG3-like; hApg3; Protein PC3-96 ; ATG3; APG3; APG3L
<b>Accession:</b>	ATG3_HUMAN ATG3_MOUSE ATG3_RAT ATG3_Saccharomyces cerevisiae ATG3_Macaca mulatta ATG3_Canis familiaris
<b>Produced in:</b>	Rabbit
<b>Purity:</b>	Whole serum
<b>Applications:</b>	IHC, WB, immunofluorescence. A dilution of 1:50 to 1:3000 dilution is recommended for these applications. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
<b>Specificity:</b>	IHC, WB and ELISA confirmed the specificity for ATG3. A 37kDa band, that corresponds to the molecular weight of ATG3, is detected via western blot analysis.
<b>Cross-reactivity:</b>	Human, rat, mouse. Other species not yet tested.
<b>Form:</b>	Lyophilised
<b>Reconstitution:</b>	Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.
<b>Storage:</b>	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.
<b>Expiry Date:</b>	12 months after purchase
<b>Specific References:</b>	1. Ryningen A et al (2012) Inhibition of Mammalian target of rapamycin in human acute myeloid

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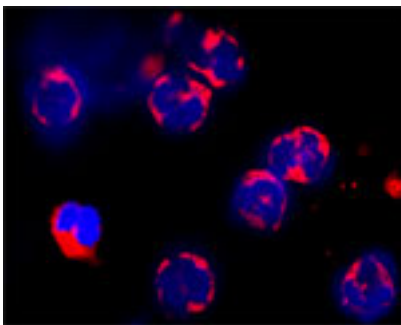
FOR RESEARCH USE ONLY

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leukemia cells has diverse effects that depend on the environmental in vitro stress.  
Bone Marrow Res. 2012;2012:329061.

### References:

1. Tanida I, et al. J. Biol. Chem. 277:13739-13744(2002).
2. Ota T, et al. Nat. Genet. 36:40-45(2004).
3. Rush J, et al. Nat. Biotechnol. 23:94-101(2005).



Confocal microscopy on immunofluorescently detected ATG3 in cytospin-isolated human white blood cells using Rabbit antibody to ATG3: whole serum (R-159-100) at a dilution of 1: 100, incubated for 1 h at room temperature. The cells stained for ATG3 appear in red. The cells were counter stained with Hoechst Dye (blue colour). Here, the merged picture is presented. More information on the staining: Fixation: In acetone for 90 seconds. Antibody dilutions: Primary antibody was diluted 1:100 and incubated for 1 hour, washed then 3x, and the secondary (Goat anti Rb 1:100 alexa 546 conjugate) was incubated for 30 minutes. Magnification 80X. No staining was observed using the Pre-immunisation serum. No staining was observed in HL60 cell line using Rabbit antibody to ATG3: whole serum (R-159-100)

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