



# ATG5 mouse Monoclonal Antibody(3C7)

<b>Catalog No</b>	BYab-04871
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	IF;WB;IHC;IP
<b>Gene Name</b>	ATG5 APG5L ASP
<b>Protein Name</b>	Autophagy protein 5 (APG5-like) (Apoptosis-specific protein)
<b>Immunogen</b>	Recombinant Protein of ATG5
<b>Specificity</b>	The antibody detects endogenous ATG5 protein
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IF: 1:50-200 IP: 1:50-200 WB 1:500-2000,IHC-p 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Autophagy protein 5 (APG5-like) (Apoptosis-specific protein)
<b>Observed Band</b>	55kD
<b>Cell Pathway</b>	Cytoplasm . Preautophagosomal structure membrane; Peripheral membrane protein. 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. .
<b>Tissue Specificity</b>	Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells.
<b>Function</b>	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. ,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. ,induction:By apoptotic stimuli. ,PTM:Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation

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membrane.,similarity:Belongs to the ATG5 family.,subcellular location:Colocalizes with nonmuscle actin.,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.,

#### 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],

#### matters needing attention

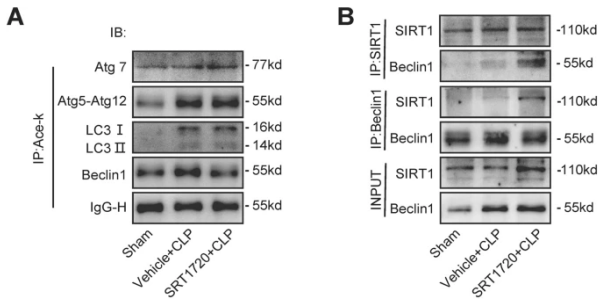
Avoid repeated freezing and thawing!

#### Usage suggestions

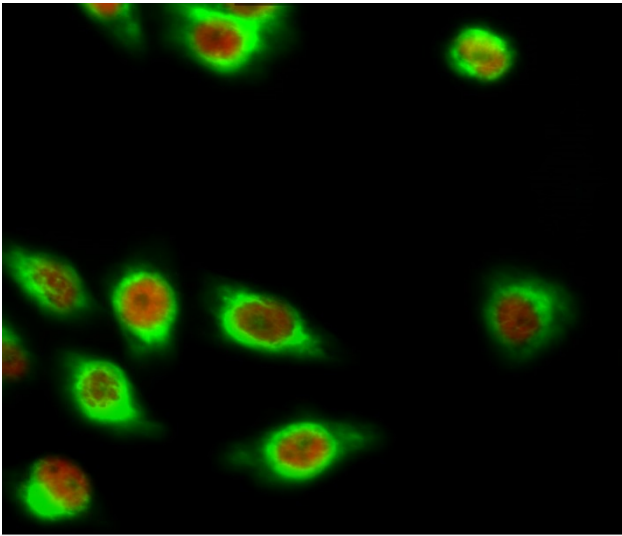
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



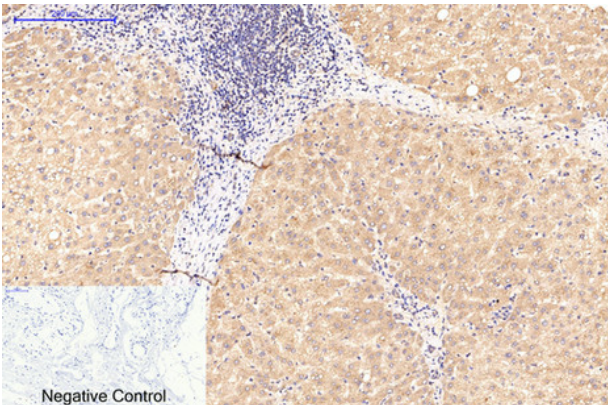
## Products Images



Deng, Z., Sun, M., Wu, J. et al. SIRT1 attenuates sepsis-induced acute kidney injury via Beclin1 deacetylation-mediated autophagy activation. *Cell Death Dis* 12, 217 (2021).

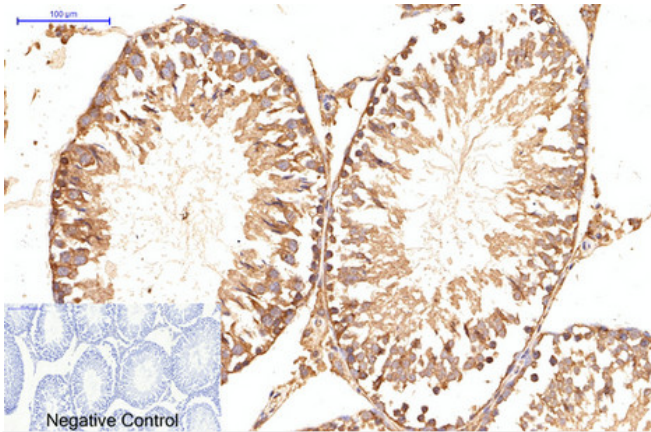


Immunofluorescence analysis of HeLa cell. 1, CREB-1 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). ATG5 mouse Monoclonal Antibody (3C7) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).

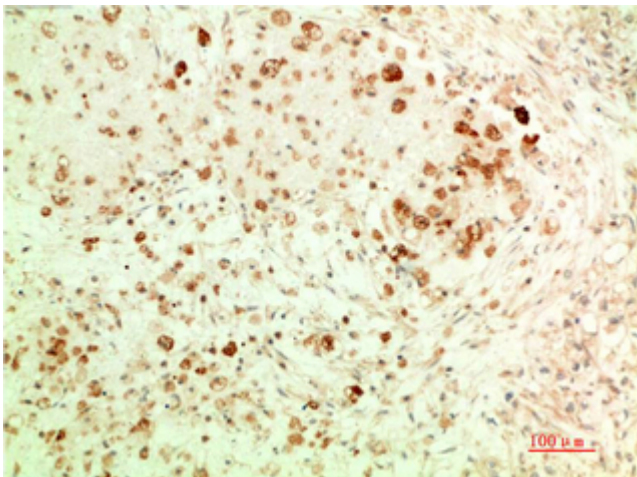


Immunohistochemical analysis of paraffin-embedded Human-breast tissue. 1, ATG5 Mouse Monoclonal Antibody (3C7) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

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Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1,ATG5 Mouse Monoclonal Antibody(3C7) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human Ovarian Carcinoma Tissue using ATG5 Mouse mAb diluted at 1:200.