

Rabbit Anti-ATG5/APG5L antibody

SL4005R

Product Name:	ATG5/APG5L
Chinese Name:	自噬蛋白5/Apoptosis的特异性蛋白抗体
Alias:	ATG5; APG 5; APG 5L; APG5; APG5 autophagy 5 like; APG5 like; APG5-like; APG5L; Apoptosis specific protein; Apoptosis-specific protein; ASP; ATG 5; ATG5 autophagy related 5 homolog; Autophagy protein 5; hAPG5; Homolog of S Cerevisiae autophagy 5; ATG5_HUMAN.
	Specific References(5) SL4005R has been referenced in 5 publications.
	[IF=2.66]Song, Fuyong, et al. "Involvement of autophagy in tri-ortho-cresyl phosphate-
	induced delayed neuropathy in hens." Neurochemistry International (2013).WB;
	PubMed:24220541
	[IF=3.53]Lang, Fangfang, et al. "Apoptotic Cell Death Induced by Resveratrol Is
	Partially Mediated by the Autophagy Pathway in Human Ovarian Cancer Cells." PLOS
	ONE 10.6 (2015): e0129196.WB;Human.
文献引用	PubMed:26067645
PubMed	[IF=2.33] Tang, Qishan, et al. "Resveratrol-induced apoptosis is enhanced by inhibition
:	of autophagy in esophageal squamous cell carcinoma." Cancer letters 336.2 (2013): 325-
	337.WB;Human.
	PubMed:23541682
	[IF=2.33]Tang, Qishan, et al. "Resveratrol-induced apoptosis is enhanced by inhibition
	of autophagy in esophageal squamous cell carcinoma." Cancer letters 336.2 (2013): 325-
	337.WB;Human.
	PubMed:23541682
	[IF=3.85]Li, Yue, et al. "Autophagy contributes to 4-Amino-2-Trifluoromethyl-Phenyl

	Retinate-induced differentiation in human acute promyelocytic leukemia NB4 cells."
	Toxicology and Applied Pharmacology (2017). WB; Human.
	PubMed:28130038
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APG5L:101-200/275
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	In yeast, autophagy is an essential process for survival during nutrient starvation and cell differentiation. The process of autophagy is characterized as a non-selective degradation of cytoplasmic proteins into membrane stuctures called autophagosomes, and it is dependent on several proteins, including the autophagy proteins APG5 and APG7. Yeast Apg7 and the human homolog, APG7, share similarities with the ubiquitin-activating enzyme E1 in Saccharomyces cerevisiae and are likewise responsible for enzymatically activating the autophagy conjugation system. Apg5 and the human homolog, APG5 (also designated apoptosis-specific protein or APS), function as substrates for the autophagy protein Apg12. These proteins are covalently bonded together to form Apg12/APG5 conjugates, which are required for the progression of autophagy.
	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 (By similarity). 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. Subunit:

The ATG5-ATG12 conjugate forms a complex with several units of ATG16. Interacts with TECPR1; the interaction is direct and does not take place when ATG16 is associated with the ATG5-ATG12 conjugate.

Subcellular Location:

Cytoplasm. Note=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.

Post-translational modifications:

Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane.

Similarity:

Belongs to the ATG5 family.

SWISS:

Q9H1Y0

Gene ID:

9474

Database links:

Entrez Gene: 9474 Human

Entrez Gene: 11793 Mouse

Entrez Gene: 365601 Rat

Omim: 604261 Human

SwissProt: Q9H1Y0 Human

SwissProt: Q99J83 Mouse

SwissProt: Q3MQ06 Rat

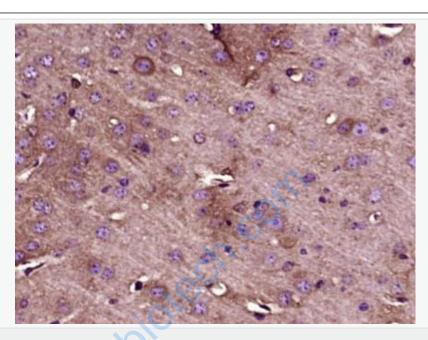
Unigene: 486063 Human

Unigene: 22264 Mouse

Unigene: 98385 Rat

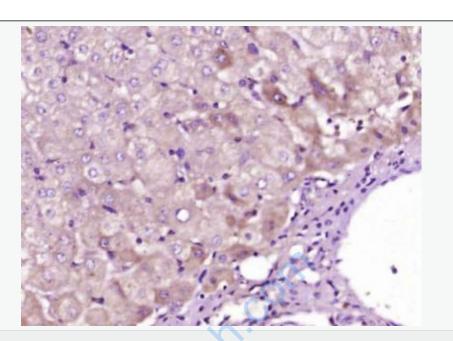
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

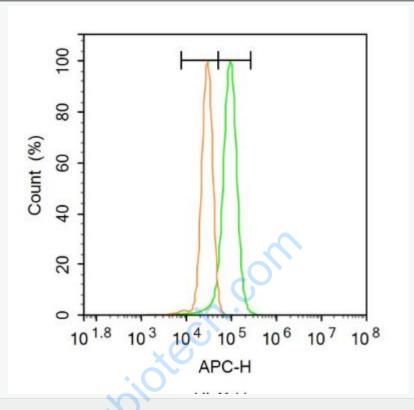


Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5) Polyclonal Antibody, Unconjugated (SL4005R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5) Polyclonal Antibody, Unconjugated (SL4005R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: A431.

Primary Antibody (green line): Rabbit Anti-ATG5 antibody (SL4005R)

Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 20% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at -20°C. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000

events was performed.

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