



Rabbit Anti-ATG5/APG5L/FITC Conjugated antibody

SL4005R-FITC

Product Name:	Anti-ATG5/APG5L/FITC
Chinese Name:	FITC标记的自噬蛋白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; ATG5 autophagy related 5 homolog; Autophagy protein 5; hAPG5; Homolog of S Cerevisiae autophagy 5; ATG5 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	Flow-Cyt=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APG5L
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.
Product Detail:	background: 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.

Database links:

[Entrez Gene: 9474](#) Human

[Entrez Gene: 11793](#) Mouse

[Entrez Gene: 365601](#) Rat

[Omim: 604261](#) Human

[SwissProt: Q9HIY0](#) Human

[SwissProt: Q99J83](#) Mouse

[SwissProt: Q3MQ06](#) Rat

[Unigene: 486063](#) Human

[Unigene: 22264](#) Mouse

[Unigene: 98385](#) Rat

Important Note:

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