

## Mouse Anti-ATG5/APG5L antibody

SLM-33386M

**Product Name** ATG5/APG5L

**Chinese Name** 自噬蛋白 5 单克隆抗体

**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.

**Research Area** Cell biology Apoptosis Autophagy

**Immunogen Species** Mouse

**Clonality** Monoclonal

**Clone NO.** 10C4

**React Species** Human, Mouse, Rat,  
WB=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 32kDa

**Cellular localization** cytoplasmic

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** Recombinant human ATG5 Protein

**Lsotype** IgG

**Purification** affinity purified by Protein G

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

## PubMed

### [PubMed](#)

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 structures 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.

## Product Detail

### **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

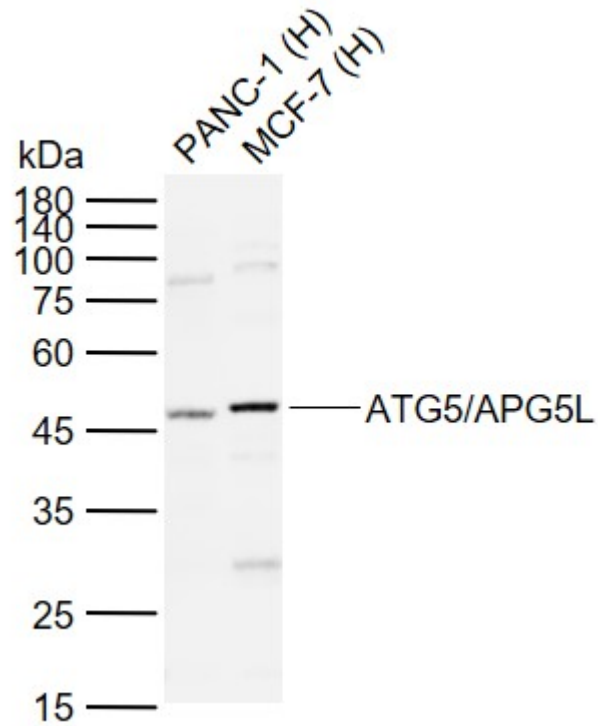
[SwissProt: Q3MQ06](#) Rat

[Unigene: 486063](#) Human

[Unigene: 22264](#) Mouse

[Unigene: 98385](#) Rat

**Product  
Picture**



Sample:

Lane 1: Human PANC-1 cell lysates

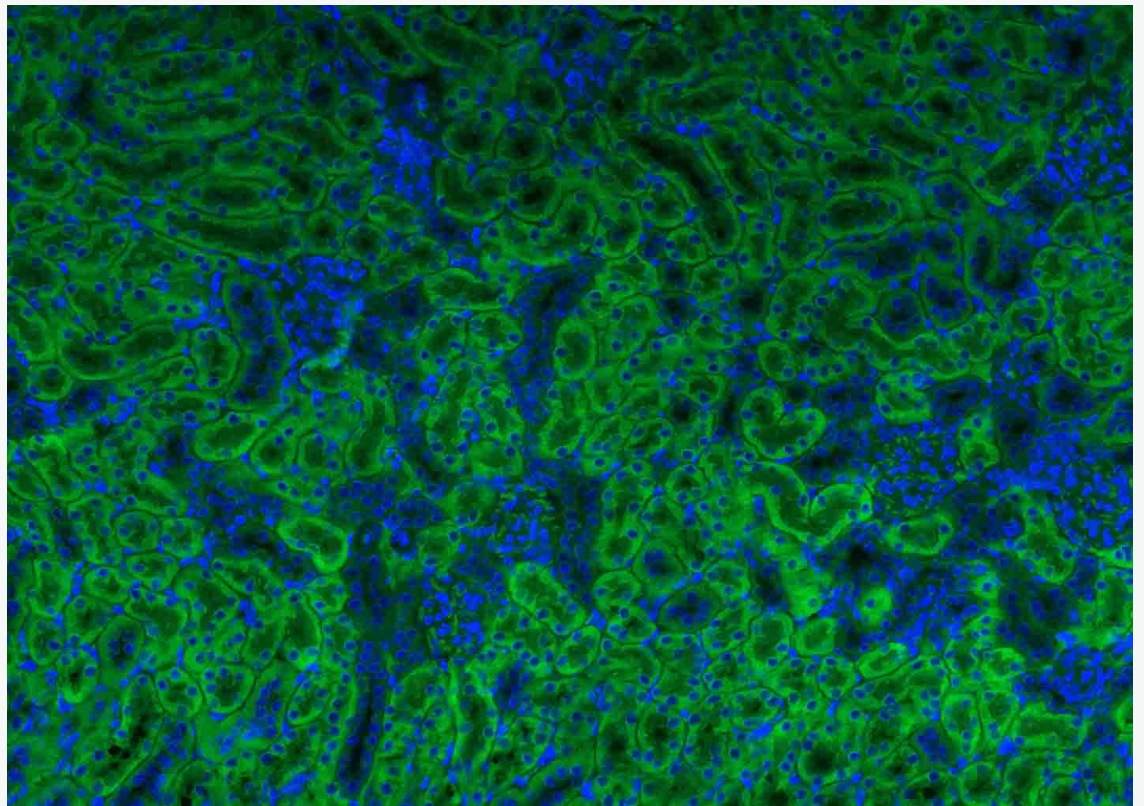
Lane 2: Human MCF-7 cell lysates

Primary: Anti-ATG5/APG5L (SLM-33386M) at 1/1000 dilution

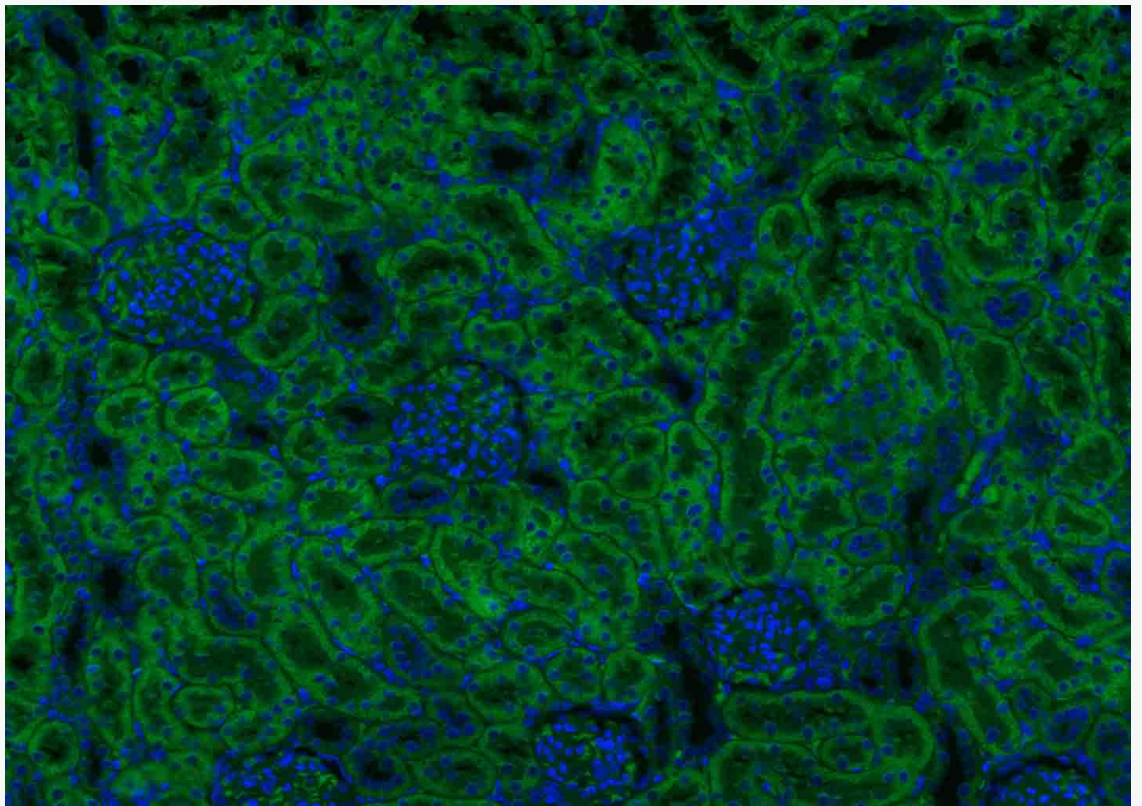
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 32 kDa

Observed band size: 47 kDa



Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5/APG5L) Polyclonal Antibody, Unconjugated (SLM-33386M) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-mouse IgG antibody (SL0296G-AF488) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5/APG5L) Polyclonal Antibody, Unconjugated (SLM-33386M) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-mouse IgG antibody (SL0296G-AF488) for 90 minutes, and DAPI for nuclei staining.