

**ATG4C Antibody**  
**Catalog # ASM10513****Specification**

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**ATG4C Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q96DT6</a>
Other Accession	<a href="#">NP_116241.2</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse</b>
Clonality	<b>Polyclonal</b>
<b>Description</b>	
Rabbit Anti-Human ATG4C Polyclonal	

**Target/Specificity**

Predicted molecular weight at ~52.5kDa. Observed molecular weights at ~45-60kDa.

**Other Names**

APG4 autophagy 4 homolog C Antibody, APG4 C Antibody, Atg4c Antibody, AUTL1 Antibody, Autophagin 3 Antibody, Cysteine protease ATG4C Antibody

**Immunogen**

Synthetic peptide from the N-terminal of human ATG4C

**Purification**

Peptide Affinity Purified

Storage	<b>-20°C</b>
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**Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	<b>Blue Ice or 4°C</b>
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**Certificate of Analysis**

A 1:1000 dilution of SPC-632 was sufficient for detection of ATG4C on HeLa cell lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm

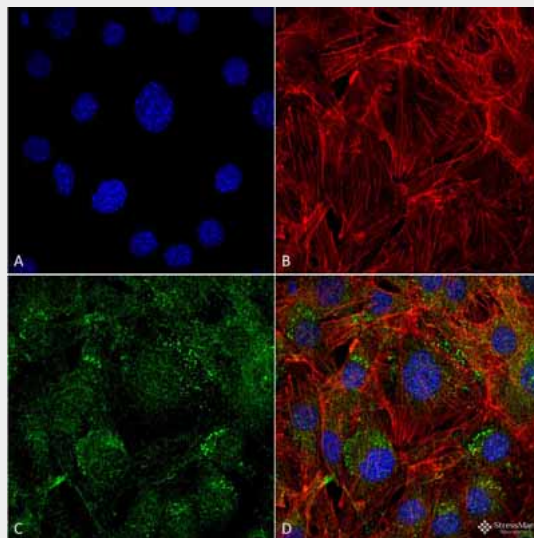
**ATG4C Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

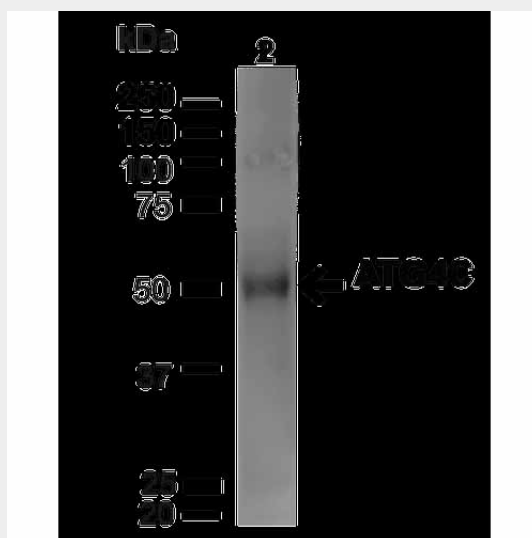
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

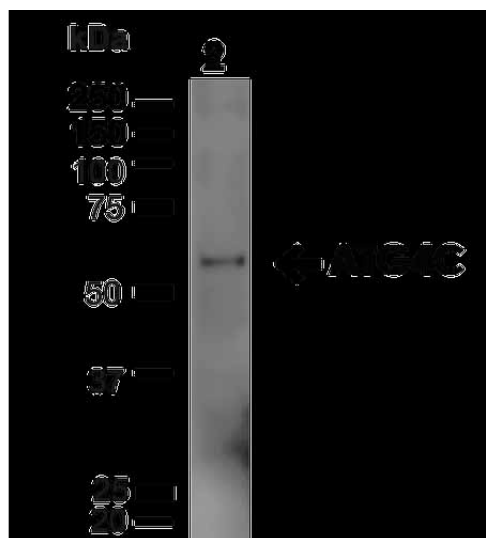
## ATG4C Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513). Tissue: Myoblast cell line (C2C12). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ATG4C Antibody (D) Composite.



Western blot analysis of Human 293T showing detection of ~52.5kDa ATG4C protein using Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513). Lane 1: MW Ladder. Lane 2: Human 293T (20 µg). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~52.5kDa.



Western blot analysis of Rat Liver showing detection of ~52.5kDa ATG4C protein using Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513). Lane 1: MW Ladder. Lane 2: Rat Liver (20 µg). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-ATG4C Polyclonal Antibody (ASM10513) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~52.5kDa.

#### **ATG4C Antibody - Background**

ATG4C belongs to the peptidase C54 family. It is a cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Is not essential for autophagy development under normal conditions but is required for a proper autophagic response under stressful conditions such as prolonged starvation (By similarity). Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3 and GABARAPL2, to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential for ATG8 proteins conjugation to phosphatidylethanolamine (PE) and insertion to membranes, which is necessary for autophagy. It also has an activity of delipidating enzyme for the PE-conjugated forms (1).

#### **ATG4C Antibody - References**

1. Li M., et al. (2011) J Biol Chem. 286: 7327-7338.