

**ATG4A Antibody**  
Catalog # ASM10509**Specification****ATG4A Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q8WYN0</a>
Other Accession	<a href="#">NP_001308216.1</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>

**Description**

Rabbit Anti-Human ATG4A Polyclonal

**Target/Specificity**

Detects ~45 kDa.

**Other Names**

ATG4 autophagy related 4 homolog A (*S. cerevisiae*) Antibody, MGC107179 Antibody, AV169859 Antibody, Autophagy-related cysteine endopeptidase 2 Antibody, hAPG4A Antibody, EC:3.4.22.- Antibody, ATG4A Antibody, Autophagin 2 Antibody, Autophagy related protein 4 homolog A Antibody, Cysteine protease ATG4A Antibody, AUTL2 Antibody, Autl2 Antibody, Autophagy-related protein 4 homolog A Antibody, Atg4a1 Antibody, Autophagin-2 Antibody, Autophagy related 4A cysteine peptidase Antibody, AUT like 2 cysteine endopeptidase Antibody, Autophagy related cysteine endopeptidase 2 Antibody, Apg4a Antibody, AUT-like 2 cysteine endopeptidase Antibody, APG4A Antibody, AI627006 Antibody, ATG4A\_HUMAN Antibody,

**Immunogen**

Synthetic peptide from the mid-protein of Human ATG4A (aa. 102-113)

**Purification**

Peptide Affinity Purified

Storage **-20°C****Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C****Certificate of Analysis**

A 1:1000 dilution of SPC-628 was sufficient for detection of ATG4A in 15 µg of Human HeLa Cell Lysates by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm

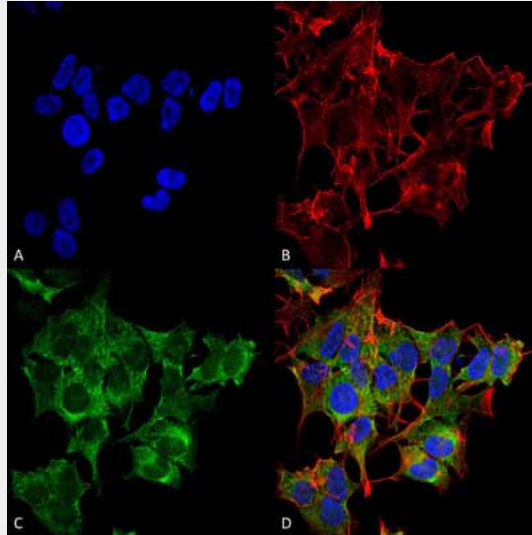
**ATG4A Antibody - Protocols**

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

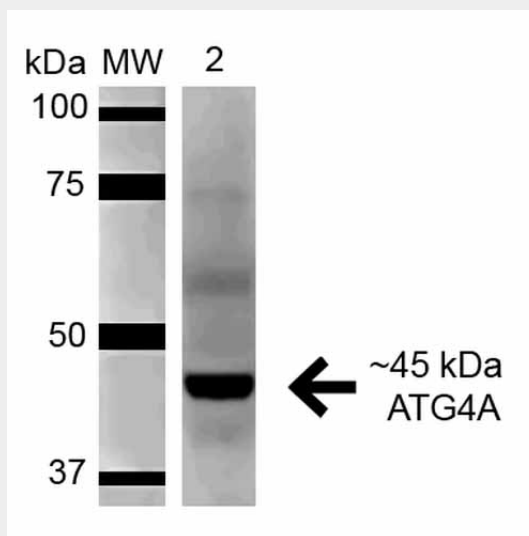
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### ATG4A Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4A Polyclonal Antibody (ASM10509). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4A Polyclonal Antibody (ASM10509) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ATG4A Antibody (D) Composite.



Western blot analysis of Rat Pancreas cell lysates showing detection of 45.3 kDa ATG4A protein using Rabbit Anti-ATG4A Polyclonal Antibody (ASM10509). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Pancreas cell lysates. Load: 15  $\mu$ g . Block: 5% Skim Milk in 1X TBST. Primary Antibody:

Rabbit Anti-ATG4A Polyclonal Antibody (ASM10509) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: 45.3 kDa. Other Band(s): ~55-60 kDa.

#### **ATG4A Antibody - Background**

Autophagy related 4A, cysteine peptidase (ATG4A or APG4A) is a C-54 cysteine protease that also belongs to the family of autophagin proteins, and is primarily found in skeletal muscle and brain. ATG4A is involved in cellular autophagy and has been studied as a target for cancer therapy. Specifically it cleaves GATE-16. Mutations in the ATG4a gene is critical for redox regulation and inhibits autophagosome formation.

#### **ATG4A Antibody - References**

1. Mariño G., et al. (2003) J Biol Chem. 278: 3671-8.
2. Scherz-Shouval R., et al. (2003) J Biol Chem. 278: 14053-8.
3. Li M., et al. (2011) J Biol Chem. 286: 7327-38.
4. Scherz-Shouval R., et al. (2007) EMBO J. 26: 1749-60.