

## ATG4D Antibody

Catalog # ASM10515

### Specification

#### ATG4D Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	<a href="#">Q86TL0</a>
Other Accession	<a href="#">NP_001268433.1</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal

#### Description

Rabbit Anti-Human ATG4D Polyclonal

#### Target/Specificity

Detects ~52kDa.

#### Other Names

APG4 autophagy 4 homolog D Antibody, APG4 D Antibody, ATG4 autophagy related 4 homolog D Antibody, AUTL4 Antibody, Cysteine protease ATG4D Antibody, MGC31226 Antibody

#### Immunogen

Synthetic peptide from the C-terminal of human ATG4D

#### Purification

Peptide Affinity Purified

Storage **-20°C**

#### Storage Buffer

PBS, 50% glycerol, 0.09% sodium azide

Shipping **Blue Ice or 4°C**  
Temperature

#### Certificate of Analysis

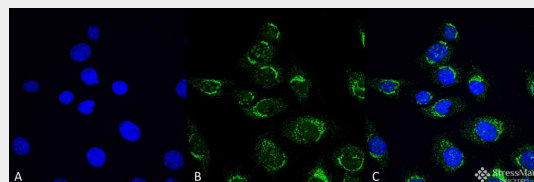
A 1:1000 dilution of SPC-634 was sufficient for detection of ATG4D on HeLa cell lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.

#### Cellular Localization

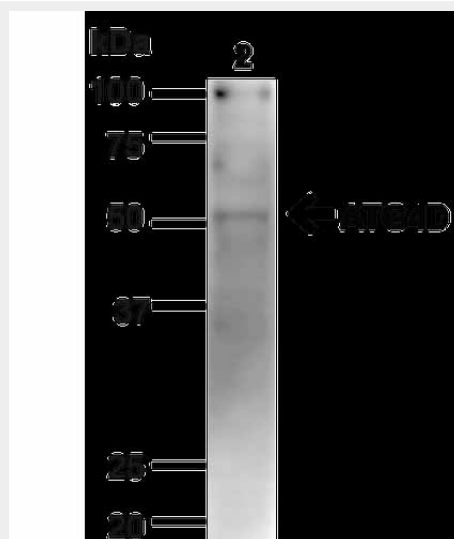
Cytoplasm

#### ATG4D Antibody - Protocols

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



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4D Polyclonal Antibody (ASM10515). Tissue: Myoblast cell line (C2C12). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody (ASM10515) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: DAPI (blue) nuclear stain at 1:5000 for 5 min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ATG4D Antibody (D) Composite.



Western blot analysis of Human HeLa cell lysates showing detection of ~52.9kDa ATG4D protein using Rabbit Anti-ATG4D Polyclonal Antibody (ASM10515). Lane 1: MW Ladder. Lane 2: Human HeLa (20 µg). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody (ASM10515) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat

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

Anti-Rabbit: HRP at 1:2000 for 1 hour at RT.  
Color Development: TMB solution for 12 min  
at RT. Predicted/Observed Size: ~52.9kDa.

### **ATG4D Antibody - Background**

ATG4D, Autophagy related 4D, cysteine peptidases, belong to the autophagy-related protein 4 family of C54 endopeptidases. Members of this family play a role in the biogenesis of autophagosomes (1). Cysteine protease ATG4D: Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. 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. Has also an activity of delipidating enzyme for the PE-conjugated forms (2).

### **ATG4D Antibody - References**

1. "Entrez Gene: Autophagy related 4D, cysteine peptidase".
2. Li M., et al. (2011) J Biol Chem. 286: 7327-7338.