

**ATG4D Antibody**  
Catalog # ASM10516**Specification**

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**ATG4D Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q86TLO</a>
Other Accession	<a href="#">NP_001268433.1</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>

**Description**

Rabbit Anti-Human ATG4D Polyclonal

**Target/Specificity**

Detects ~53 kDa.

**Other Names**

Autophagin-4 Antibody, APG4D Antibody, ATG4D Antibody, Cysteine protease ATG4D Antibody, AUTL4 Antibody, Autophagy-related cysteine endopeptidase 4 Antibody, EC:3.4.22.- Antibody, AUT-like 4 cysteine endopeptidase Antibody, Autophagy-related protein 4 homolog D Antibody,

**Immunogen**

Synthetic peptide from the N-terminal of Human ATG4D (aa. 98-108)

**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-635 was sufficient for detection of ATG4D 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

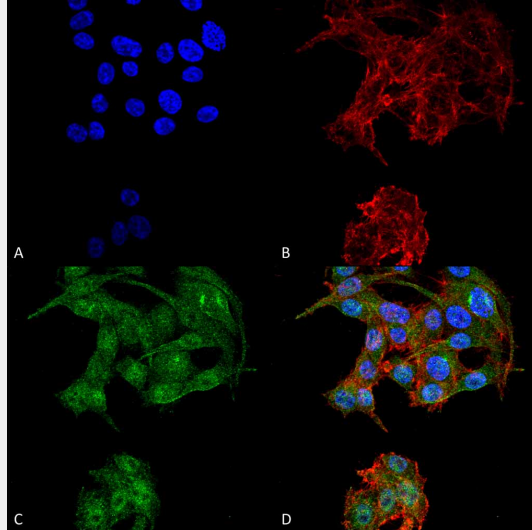
**ATG4D Antibody - Protocols**

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

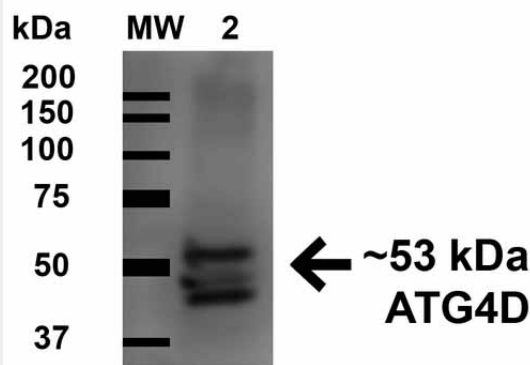
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

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

### ATG4D Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4D Polyclonal Antibody (ASM10516). Tissue: Colon carcinoma cell line (RKO). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody (ASM10516) 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 60 min at RT, 5 min at RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI 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 52.9 kDa ATG4D protein using Rabbit Anti-ATG4D Polyclonal Antibody (ASM10516). Lane 1: Molecular Weight Ladder (MW). Lane 2: Human HeLa cell lysates. Load: 15  $\mu$ g. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody (ASM10516) 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: 52.9 kDa. Other Band(s): ~45 and 48 kDa.

### 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.