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Datasheet for ABIN5066074

anti-ATG4D antibody (AA 98-108) (Alkaline Phosphatase (AP))

2 Images

Overview

| | |
|----------------------|---|
| Quantity: | 100 µg |
| Target: | ATG4D |
| Binding Specificity: | AA 98-108 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This ATG4D antibody is conjugated to Alkaline Phosphatase (AP) |
| Application: | Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC) |

Product Details

| | |
|-------------------|--|
| Immunogen: | Synthetic peptide from the N-terminal of Human ATG4D (aa. 98-108) |
| Isotype: | IgG |
| Specificity: | Mainly expressed in skeletal muscle and, to a lower extent, in testis., Detects ~53 kDa. |
| Cross-Reactivity: | Human |
| Purification: | Peptide Affinity Purified |

Target Details

| | |
|-------------------|---|
| Target: | ATG4D |
| Alternative Name: | ATG4D (ATG4D Products) |
| Background: | ATG4D, Autophagy related 4D, cysteine peptidases, belong to the autophagy-related protein 4 |

Target Details

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).

Gene ID: 84971

NCBI Accession: [NP_001268433](#)

UniProt: [Q86TL0](#)

Pathways: [Autophagy](#)

Application Details

Application Notes:

- WB (1:1000)
- ICC/IF (1:100)
- optimal dilutions for assays should be determined by the user.

Comment: A 1:1000 dilution of ABIN5066074 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.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

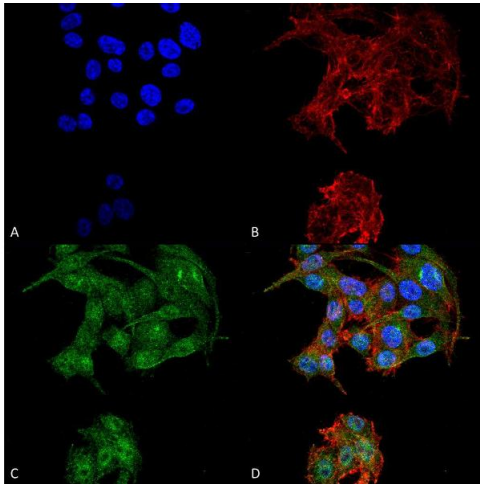
Buffer: PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

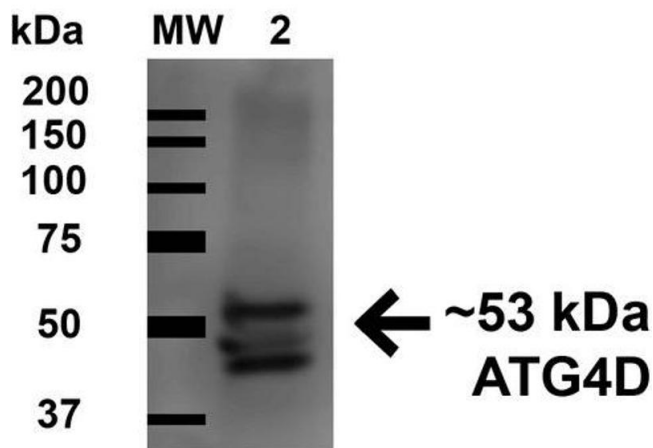
Storage: 4 °C

Storage Comment: Conjugated antibodies should be stored at 4°C



Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4D Polyclonal Antibody . Tissue: Colon carcinoma cell line (RKO). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody 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 Blotting

Image 2. Western blot analysis of Human HeLa cell lysates showing detection of 52.9 kDa ATG4D protein using Rabbit Anti-ATG4D Polyclonal Antibody . Lane 1: Molecular Weight Ladder (MW). Lane 2: Human HeLa cell lysates. Load: 15 µg . Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-ATG4D Polyclonal Antibody 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.