Datasheet for ABIN2868963

anti-ATG4C antibody (N-Term) (Alkaline Phosphatase (AP))

3 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	ATG4C
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG4C 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 ATG4C
Specificity:	Predicted molecular weight at ~52.5 kDa. Observed molecular weights at ~45-60 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Peptide Affinity Purified

Target Details

Target:	ATG4C
Alternative Name:	ATG4C (ATG4C Products)
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

Target Details

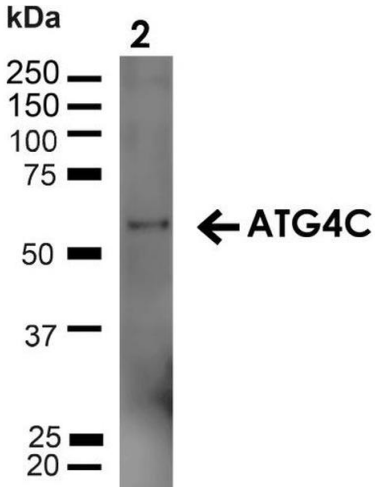
	normal conditions but is required for a proper autophagic response under stressful conditions such as prolonged starvation (By similarity). Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3 and GABARAPL2, to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential 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).
Gene ID:	84938
NCBI Accession:	NP_116241
UniProt:	Q96DT6
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 ABIN2868963 was sufficient for detection of ATG4C on HeLa cell lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

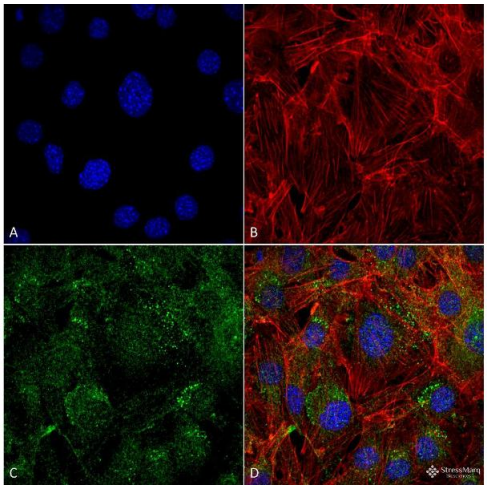
Handling

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



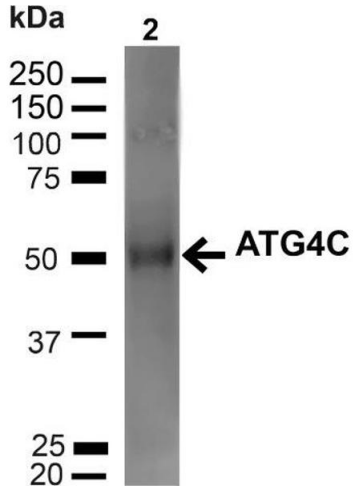
Western Blotting

Image 1. Western blot analysis of Rat Liver showing detection of ~52.5 kDa ATG4C protein using Rabbit Anti-ATG4C Polyclonal Antibody (ABIN2868963). 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 (ABIN2868963) 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: ~52.5 kDa.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG4C Polyclonal Antibody . Tissue: Myoblast cell line (C2C12). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG4C 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 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 Blotting

Image 3. Western blot analysis of Human Embryonic kidney epithelial cell line (HEK293T) lysate showing detection of ~52.5 kDa ATG4C protein using Rabbit Anti-ATG4C Polyclonal Antibody (ABIN2868963). 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 (ABIN2868963) 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: ~52.5 kDa.