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Datasheet for ABIN2868862
anti-ATG12 antibody (C-Term) (PE)

2 Images

Overview

Quantity:	100 µg
Target:	ATG12
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG12 antibody is conjugated to PE
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	Synthetic peptide from the C-terminal of human ATG12
Specificity:	Predicted molecular weight at ~15.1 kDa. Observed molecular weights at ~48-55 kDa based on ATG12-ATG5 heterodimer.
Cross-Reactivity:	Human
Purification:	Peptide Affinity Purified

Target Details

Target:	ATG12
Alternative Name:	ATG12 (ATG12 Products)
Background:	ATG12 (autophagy-related protein 12), also known as APG12, is a 140 amino acid protein that is

Target Details

ubiquitously expressed and belongs to the ATG12 family of proteins. ATG12 is a homolog of the yeast protein APG12 that participates in autophagy. Autophagy is a membrane trafficking mechanism that delivers cytoplasmic cargo to the vacuole/lysosome for degradation and recycling. In yeast, autophagy requires a protein conjugation system consisting of APG12 covalently bound at the carboxy terminal glycine to lysine 149 of APG5. Similarly in humans, ATG12 is essential for autophagy and localizes to the cytoplasm where it is covalently bound to APG5, a conjugation reaction that requires APG7, ATG10 and ATP (1-3). The ATG12-APG5 conjugate functions as an important regulator of the autophagic process and is required for the change in membrane morphology and development of autophagosomes. Due to alternative splicing events, two ATG12 isoforms exist.

Gene ID: 9140

NCBI Accession: [NP_001264712](#)

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 ABIN2868862 was sufficient for detection of ATG12 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

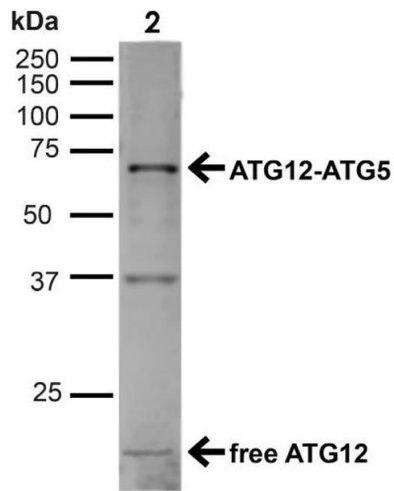
Buffer: PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

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 Human Cervical cancer cell line (HeLa) lysate showing detection of ~15 kDa ATG12 protein using Rabbit Anti-ATG12 Polyclonal Antibody (ABIN2868862). 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-ATG12 Polyclonal Antibody (ABIN2868862) 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: ~15 kDa. Other Band(s): ATG12-ATG5 Complex.

Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG12 Polyclonal Antibody. Tissue: Cervical Cancer cell line (HeLa). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG12 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: DAPI (blue) nuclear stain at 1:5000 for 5 min RT. Localization: Nucleus, Cytoplasm. Magnification: 40X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ATG12 Antibody (D) Composite.

