

Datasheet for ABIN388536

anti-ATG12 antibody (N-Term)**4** Images**5** Publications[Go to Product page](#)

Overview

Quantity:	400 µL
Target:	ATG12
Binding Specificity:	AA 1-30, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG12 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This ATG12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human ATG12.
Clone:	RB7475
Isotype:	Ig Fraction
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	ATG12
Alternative Name:	ATG12 (ATG12 Products)

Target Details

Background:	Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). APG12L is the human homolog of yeast APG12, a ubiquitin-activating enzyme E1-like protein essential for the conjugation system that mediates membrane fusion in autophagy.
Molecular Weight:	15113
Gene ID:	9140
NCBI Accession:	NP_001264712 , NP_004698
UniProt:	O94817
Pathways:	Autophagy

Application Details

Application Notes:	IF: 1:200. WB: 1:2000. IHC-P: 1:50~100. IHC-P: 1:50~100
Restrictions:	For Research Use only

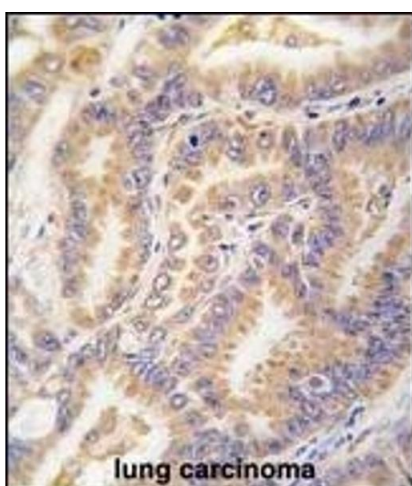
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
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,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Publications

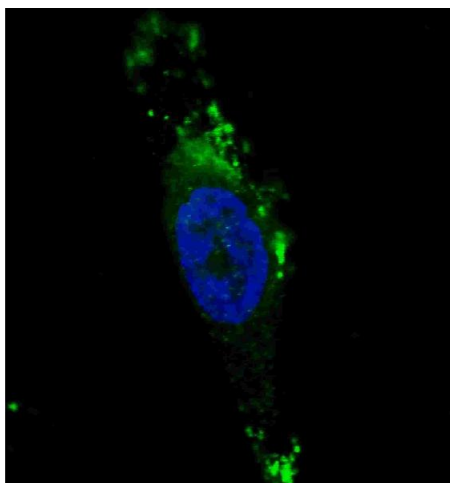
- Product cited in: Yang, Zhao, Mei, Jiang, Geng, Li, Yao, Liu, Kong, Cao: "HMGA2 plays an important role in Cr (VI)-induced autophagy." in: **International journal of cancer**, Vol. 141, Issue 5, pp. 986-997, (2017) ([PubMed](#)).
- Chen, Cao, Zhou, Liu, Che, Mizumura, Li, Choi, Shen: "Interaction of caveolin-1 with ATG12-ATG5 system suppresses autophagy in lung epithelial cells." in: **American journal of physiology. Lung cellular and molecular physiology**, Vol. 306, Issue 11, pp. L1016-25, (2014) ([PubMed](#)).
- Sanchez, Penforis, Oskowitz, Boonjindasup, Cai, Dhule, Rowan, Kelekar, Krause, Pochampally: "Activation of autophagy in mesenchymal stem cells provides tumor stromal support." in: **Carcinogenesis**, Vol. 32, Issue 7, pp. 964-72, (2011) ([PubMed](#)).
- Yee, Wilkinson, James, Ryan, Vousden: "PUMA- and Bax-induced autophagy contributes to apoptosis." in: **Cell death and differentiation**, Vol. 16, Issue 8, pp. 1135-45, (2009) ([PubMed](#)).
- Harada, Willison, Sakakibara, Miyamoto, Fujita, Taniguchi: "Absence of the type I IFN system in EC cells: transcriptional activator (IRF-1) and repressor (IRF-2) genes are developmentally regulated." in: **Cell**, Vol. 63, Issue 2, pp. 303-12, (1990) ([PubMed](#)).

Images



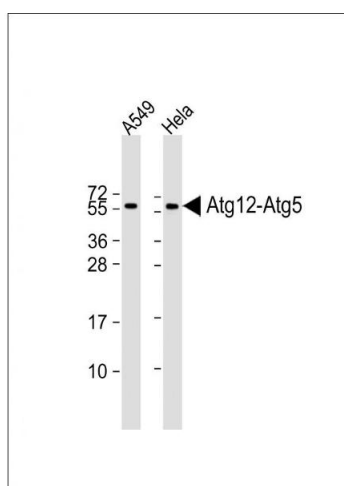
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with Autophagy G12L antibody (N-term) 1816a, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated.



Immunofluorescence

Image 2. Fluorescent image of cells stained with ATG12 (N-term) antibody. cells were treated with Chloroquine (50 μ M, 16h), then fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.2 %, 30 min). Cells were then incubated with (ABIN388536 and ABIN2849671) ATG12 (N-term) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 μ g/mL, 5 min). ATG12 immunoreactivity is localized to autophagic vacuoles in the cytoplasm of cells.



Western Blotting

Image 3. All lanes : Anti-G12L Antibody (E3) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 15 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN388536.