Datasheet for ABIN388483

anti-MAP1LC3A antibody (cleaved)

7 Images | 35 Publications

Go to Product page

Overview

Quantity:	400 µL
Target:	MAP1LC3A
Binding Specificity:	AA 89-120, cleaved
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAP1LC3A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Immunogen:	This Cleaved LC3A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-120 amino acids from human Cleaved LC3A or LC3B.
Clone:	RB38908
Isotype:	IgG
Predicted Reactivity:	Zf, B, Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	MAP1LC3A

Target Details

Alternative Name:	LC3A (MAP1LC3A Products)
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). MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. These proteins are involved in formation of autophagosomal vacuoles (autophagosomes). MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. MAP1LC3a is one of the light chain subunits and can associate with either MAP1A or MAP1B. The precursor molecule is cleaved by APG4B/ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II.
Gene ID:	84557
NCBI Accession:	NP_115903, NP_852610
UniProt:	Q9H492, Q9GZQ8
Pathways:	Autophagy

Application Details

Application Notes:	IF: 1:25. IF: 1:25. WB: 1:500. WB: 1:500. WB: 1:500. WB: 1:500. WB: 1:1000
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.
Handling Advice:	Avoid freeze-thaw cycles.

Handling

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.
Expiry Date:	6 months

Publications

Product cited in:

Giatromanolaki, Sivridis, Kalamida, Koukourakis: "Transcription Factor EB Expression in Early Breast Cancer Relates to Lysosomal/Autophagosomal Markers and Prognosis." in: **Clinical breast cancer**, Vol. 17, Issue 3, pp. e119-e125, (2018) (PubMed).

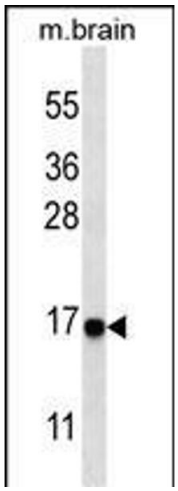
Tavera-Mendoza, Westerling, Libby, Marusyk, Cato, Cassani, Cameron, Ficarro, Marto, Klawitter, Brown: "Vitamin D receptor regulates autophagy in the normal mammary gland and in luminal breast cancer cells." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 114, Issue 11, pp. E2186-E2194, (2018) (PubMed).

Bingel, Koeneke, Ridinger, Bittmann, Sill, Peterziel, Wrobel, Rettig, Milde, Fernekorn, Weise, Schober, Witt, Oehme: "Three-dimensional tumor cell growth stimulates autophagic flux and recapitulates chemotherapy resistance." in: **Cell death & disease**, Vol. 8, Issue 8, pp. e3013, (2018) (PubMed).

Miyamoto, Takano, Aoyama, Soyama, Yoshikawa, Tsuda, Furuya: "Inhibition of autophagy protein LC3A as a therapeutic target in ovarian clear cell carcinomas." in: **Journal of gynecologic oncology**, Vol. 28, Issue 3, pp. e33, (2017) (PubMed).

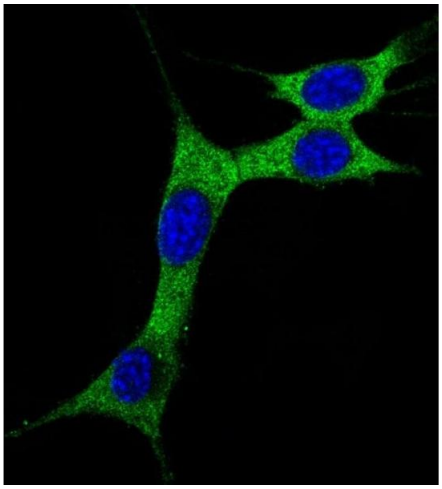
Martinet, Roth, De Meyer: "Standard Immunohistochemical Assays to Assess Autophagy in Mammalian Tissue." in: **Cells**, Vol. 6, Issue 3, (2017) (PubMed).

There are more publications referencing this product on: Product page



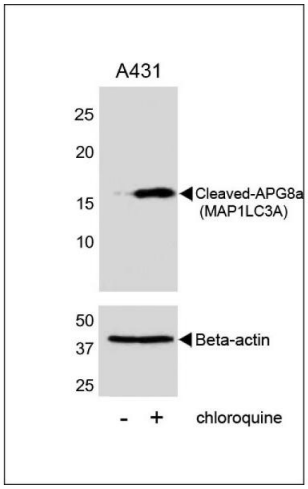
Western Blotting

Image 1. Western blot analysis of anti-cleaved-LC3 (G8a) Pab 1805a in mouse brain tissue lysate. Cleaved-LC3 (G8a) was detected using the purified Pab.



Immunofluorescence

Image 2. Immunofluorescent analysis of 4 % paraforldehyde-fixed, 0.1 % Triton X-100 permeabilized NIH/3T3 (Mouse mouse embryonic fibroblasts cell line) cells labeling P1LC3A with A at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). The nuclear counter stain is DI (blue). Immunofluorescence ige showing cytoplasm on NIH/3T3 cell line.



Western Blotting

Image 3. Western blot analysis of lysates from A431 cell line, untreated or treated with chloroquine, 100 ng/mL, using Cleaved-G8a (M1LC3A) 1805a (upper) or Beta-actin (lower).

Please check the product details page for more images. Overall 7 images are available for ABIN388483.