

Mouse LC3 Monoclonal Antibody | anti-MAP1LC3A antibody

LC3 Antibody (APG8)

CATALOG # AAA28636	HOST Mouse	REACTIVITY Human, mouse, rat	APPLICATIONS Western Blot, ELISA
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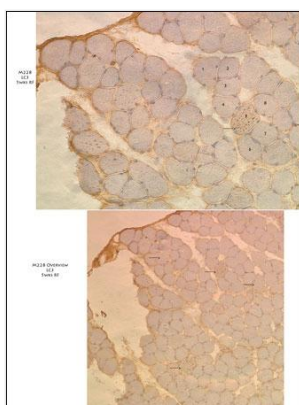
PRODUCT SYNONYMS

LC3; Monoclonal Antibody; LC3 Antibody (APG8); Microtubule-associated proteins 1A/1B light chain 3A; Autophagy-related protein LC3 A; Autophagy-related ubiquitin-like modifier LC3 A; MAP1 light chain 3-like protein 1; MAP1A/MAP1B light chain 3 A; MAP1A/MAP1B LC3 A; Microtubule-associated protein 1 light chain 3 alpha; MAP1LC3A; anti-MAP1LC3A antibody

PRODUCT SPECIFICATIONS

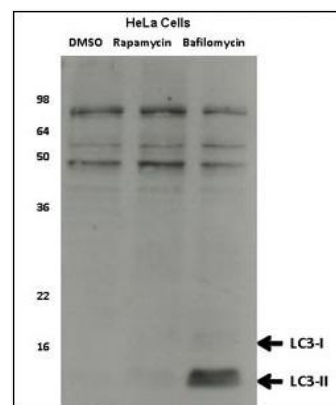
Host	Mouse
Reactivity	Human, mouse, rat
Clonality	Monoclonal
Isotype	Mouse IgG1 k
Specificity	This LC3 antibody is generated from mouse immunized with a full length recombinant protein of human LC3 (APG8).
Purity/Purification	This antibody is purified through a protein G column, followed by dialysis against PBS.
Form/Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Length	121
Applicable Applications for anti-MAP1LC3A antibody	WB (Western Blot), ELISA
Application Notes	WB~~1:8000
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

IMAGES



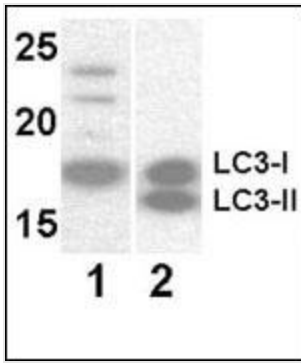
IHC (Immunohistochemistry)

10X(lower panel) and 20X (upper panel) immunohistochemistry images from muscle tissue of a diseased mouse off Dox after 5 weeks on regular food. Several fibers that have autophagic vesicles throughout are visible. Primary antibody used is. Data courtesy of Dr. Christy Caudill, Cincinnati Children's Hospital Medical Center.



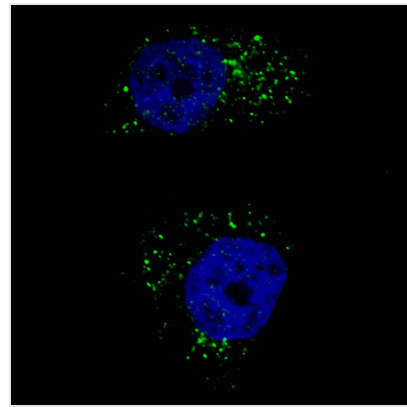
WB (Western Blot)

Western blot analysis of anti-LC3 Mab HeLa cell lysates, which were treated with rapamycin or bafilomycin overnight. Data courtesy of Dr. David Rubinshtein, Cambridge Institute for Medical Research.



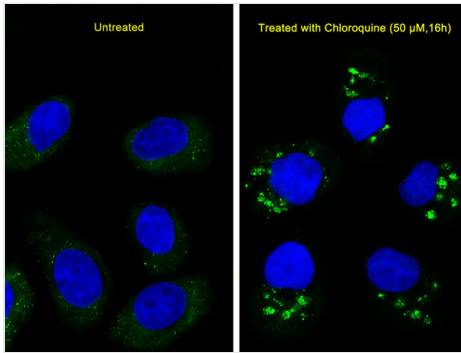
WB (Western Blot)

Western blot analysis of anti-LC3 Mab at 8 ug/ml. Lane 1: Y79 (soluble fraction of cell extract); Lane 2: 293 transfected with human LC3 (whole cell extract).



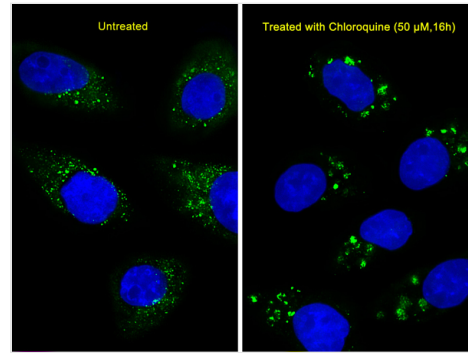
IF (Immunofluorescence)

Fluorescent image of U251 cells stained with AAA28636 LC3 (APG8) antibody. U251 cells were treated with Chloroquine (50 uM, 16h), then fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AAA28636 LC3 (APG8) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-mouse antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 ug/ml, 5 min). LC3 immunoreactivity is localized to autophagic vacuoles in the cytoplasm of U251 cells.



IF (Immunofluorescence)

Immunofluorescent analysis of U251 cells, using LC3 Antibody (APG8). U251 cells (right) were treated with Chloroquine (50 uM, 16h). AAA28636 was diluted at 1:25 dilution. Dylight Fluor 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue).



IF (Immunofluorescence)

Immunofluorescent analysis of U251 cells, using LC3 Antibody (APG8). U251 cells (right) were treated with Chloroquine (50 uM, 16h). AAA28636 was diluted at 1:25 dilution. Dylight Fluor 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue).

ADDITIONAL INFORMATION

Related Product Information for anti-MAP1LC3A antibody	MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. The protein encoded by this gene is one of the light chain subunits and can associate with either MAP1A or MAP1B. Two transcript variants encoding different isoforms have been found for this gene.
Product Categories/Family for anti-MAP1LC3A antibody	Signal Transduction ; Neuroscience ; Microbiology ; Metabolism ; Cell Biology ; Cardiovascular ; Cancer ; Autophagy

References	References for protein: 1. Autophagy negatively regulates Wnt signalling by promoting Dishevelled degradation. Gao C, et al. Nat Cell Biol, 2010 Aug. PMID 20639871. 2. The prolyl isomerase Pin1 induces LC-3 expression and mediates tamoxifen resistance in breast cancer. Namgoong GM, et al. J Biol Chem, 2010 Jul 30. PMID 20479004. 3. Protein kinase C inhibits autophagy and phosphorylates LC3. Jiang H, et al. Biochem Biophys Res Commun, 2010 May 14. PMID 20398630. 4. Processing of autophagic protein LC3 by the 20S proteasome. Gao Z, et al. Autophagy, 2010 Jan. PMID 20061800. 5. Defective autophagy associated with LC3 puncta in epothilone-resistant cancer cells. Shen S, et al. Cell Cycle, 2010 Jan 15. PMID 20023420. References for U251 cell line: 1. Westermarck B.; Pontén J.; Hugosson R. (1973). "Determinants for the establishment of permanent tissue culture lines from human gliomas". Acta Pathol Microbiol Scand A. 81:791-805. [PMID: 4359449]. 2. Pontén, J., Westermarck B. (1978). "Properties of Human Malignant Glioma Cells in Vitro". Medical Biology 56: 184-193. [PMID: 359950]. 3. Geng Y.; Kohli L.; Klocke B.J.; Roth K.A. (2010). "Chloroquine-induced autophagic vacuole accumulation and cell death in glioma cells is p53 independent". Neuro Oncol. 12(5): 473-481. [PMID: 20406898].
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NCBI AND UNIPROT INFORMATION

NCBI GI #	14210522
NCBI GeneID	84557
NCBI Accession #	NP_115903.1 ; NP_852610.1
NCBI GenBank Nucleotide #	NM_032514.3
UniProt Accession #	Q9H492 ; Q9BXW5 ; E1P5P4 ; E1P5P5
NCBI Official Full Name	microtubule-associated proteins 1A/1B light chain 3A isoform a
NCBI Official Synonym Full Names	microtubule-associated protein 1 light chain 3 alpha
NCBI Official Symbol	MAP1LC3A
NCBI Official Synonym Symbols	LC3; LC3A; ATG8E; MAP1ALC3; MAP1BLC3
NCBI Protein Information	microtubule-associated proteins 1A/1B light chain 3A
UniProt Protein Name	Microtubule-associated proteins 1A/1B light chain 3A
UniProt Gene Name	MAP1LC3A
UniProt Synonym Gene Names	MAP1A/MAP1B LC3 A
UniProt Entry Name	MLP3A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/lc3-antibody-western-blot-elisa/28636>