

## Rabbit anti-Human LC3 Polyclonal Antibody | anti-MAP1LC3A antibody

LC3 Antibody (APG8A) (D106)

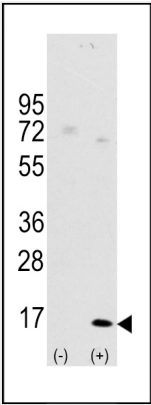
| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                            |
|-----------|--------|------------|-----------------------------------------|
| AAA284047 | Rabbit | Human      | Western Blot, ELISA, Immunofluorescence |

### PRODUCT SYNONYMS

LC3; Polyclonal Antibody; LC3 Antibody (APG8A) (D106); 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

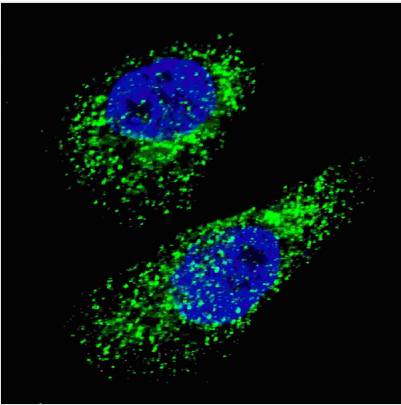
### PRODUCT SPECIFICATIONS

|                                                    |                                                                                                                                                                              |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                               | Rabbit                                                                                                                                                                       |
| Reactivity                                         | Human                                                                                                                                                                        |
| Clonality                                          | Polyclonal                                                                                                                                                                   |
| Isotype                                            | Rabbit Ig                                                                                                                                                                    |
| Clone Number                                       | RB13262                                                                                                                                                                      |
| Specificity                                        | This LC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 91-117 amino acids from human LC3.                                     |
| Purity/Purification                                | Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)                                                                                                                   |
| Form/Format                                        | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| Sequence Positions                                 | 91-117                                                                                                                                                                       |
| Sequence Length                                    | 121                                                                                                                                                                          |
| Applicable Applications for anti-MAP1LC3A antibody | WB (Western Blot), ELISA, IF (Immunofluorescence)                                                                                                                            |
| Predicted Reactivity                               | Bovine, Mouse, Rat                                                                                                                                                           |
| Preparation and Storage                            | Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.                        |



WB (Western Blot)

Western blot analysis of LC3 (APG8a) (arrow) using rabbit polyclonal Autophagy LC3 Antibody (APG8a) (D106). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the LC3 (APG8a) gene (Lane 2) (Origene Technologies).



IF (Immunofluorescence)

Fluorescent image of U251 cells stained with LC3 (APG8a) (D106) 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 AAA284047 LC3 (APG8a) (D106) primary antibody (1:100, 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 ug/ml, 5 min). LC3 immunoreactivity is localized to autophagic vacuoles in the cytoplasm of U251 cells.

ADDITIONAL INFORMATION

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-MAP1LC3A antibody | 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. |
| Product Categories/Family for anti-MAP1LC3A antibody   | Signal Transduction; Neuroscience; Microbiology; Metabolism; Cell Biology; Cardiovascular; Cancer; Phospho Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| References                                             | References for protein:<br>1.Tanida, I., et al., J. Biol. Chem. 279(35):36268-36276 (2004).<br>2.He, H., et al., J. Biol. Chem. 278(31):29278-29287 (2003).<br>3.Mann, S.S., et al., J. Neurosci. Res. 43(5):535-544 (1996).<br>References for U251 cell line:<br>1. Westermark 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].<br>2. Pontén, J.,Westermark B. (1978)." Properties of Human Malignant Glioma Cells in Vitro". Medical Biology 56: 184-193.[PMID: 359950].<br>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].                                                                                                                                                                                                                                                                                                                                                                                                       |

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 #              | <a href="#">Q9H492</a> ; <a href="#">Q9BXW5</a> ; <a href="#">E1P5P4</a> ; <a href="#">E1P5P5</a> |
| Molecular Weight                 | 14272                                                                                             |
| 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                | <b>MAP1LC3A</b>                                                                                   |
| 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.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/lc3-antibody-clone-rb13262-western-blot-immunofluorescence-elisa/284047>