

**APG8b (MAP1LC3B)-T93/Y99 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1802e****Specification**

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**APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Product Information**

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Application       | WB, IHC-P, FC,E                                      |
| Primary Accession | <a href="#">O9GZQ8</a>                               |
| Other Accession   | <a href="#">A6NCE7</a> , <a href="#">NP_073729.1</a> |
| Reactivity        | Human, Mouse                                         |
| Host              | Rabbit                                               |
| Clonality         | Polyclonal                                           |
| Isotype           | Rabbit IgG                                           |
| Calculated MW     | 14688                                                |
| Antigen Region    | 74-106                                               |

**APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Additional Information****Gene ID** 81631**Other Names**

Microtubule-associated proteins 1A/1B light chain 3B, Autophagy-related protein LC3 B, Autophagy-related ubiquitin-like modifier LC3 B, MAP1 light chain 3-like protein 2, MAP1A/MAP1B light chain 3 B, MAP1A/MAP1B LC3 B, Microtubule-associated protein 1 light chain 3 beta, MAP1LC3B, MAP1ALC3

**Target/Specificity**

This APG8b (MAP1LC3B)-T93/Y99 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 74-106 amino acids from the Central region of human APG8b (MAP1LC3B)-T93/Y99.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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.

**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.

**Precautions**

APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Protein Information**

**Name** MAP1LC3B ([HGNC:13352](#))

**Synonyms** MAP1ALC3

**Function** Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:[20418806](#), PubMed:[23209295](#), PubMed:[28017329](#)). Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production (PubMed:[23209295](#), PubMed:[28017329](#)). In response to cellular stress and upon mitochondria fission, binds C-18 ceramides and anchors autophagolysosomes to outer mitochondrial membranes to eliminate damaged mitochondria (PubMed:[22922758](#)). While LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:[20418806](#), PubMed:[23209295](#), PubMed:[28017329](#)). Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway (PubMed:[24089205](#)). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:[31006537](#), PubMed:[31006538](#)). Upon nutrient stress, directly recruits cofactor JMY to the phagophore membrane surfaces and promotes JMY's actin nucleation activity and autophagosome biogenesis during autophagy (PubMed:[30420355](#)).

#### **Cellular Location**

Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor Endomembrane system; Lipid-anchor Mitochondrion membrane; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9CQV6}. Cytoplasmic vesicle. Note=LC3-II binds to the autophagic membranes. LC3-II localizes with the mitochondrial inner membrane during Parkin-mediated mitophagy (PubMed:[28017329](#)). Localizes also to discrete punctae along the ciliary axoneme

#### **Tissue Location**

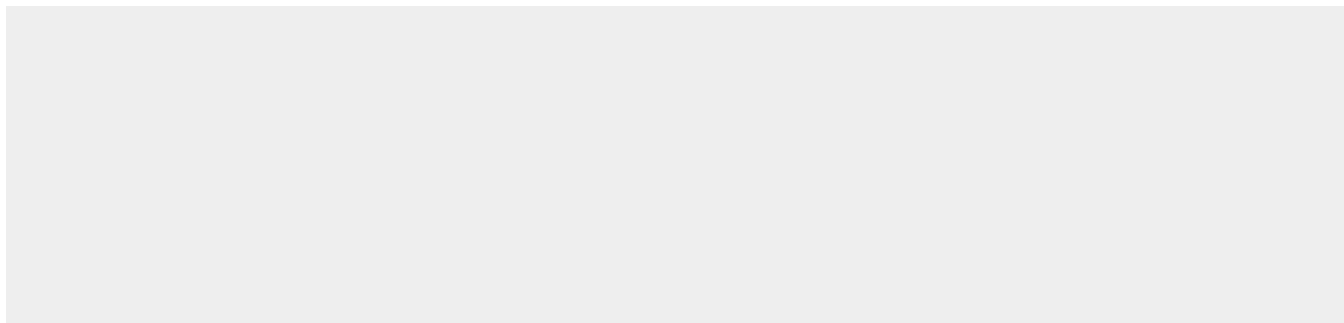
Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver

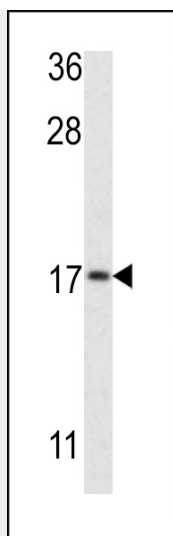
### **APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

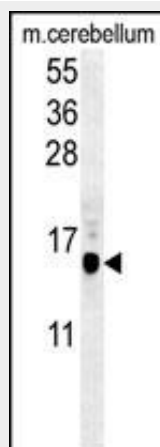
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Images**

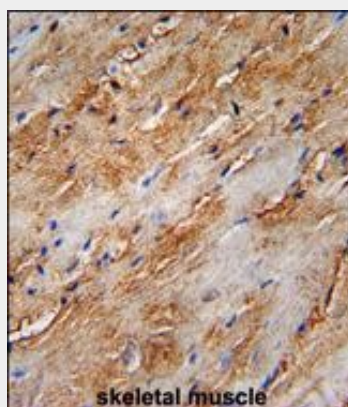




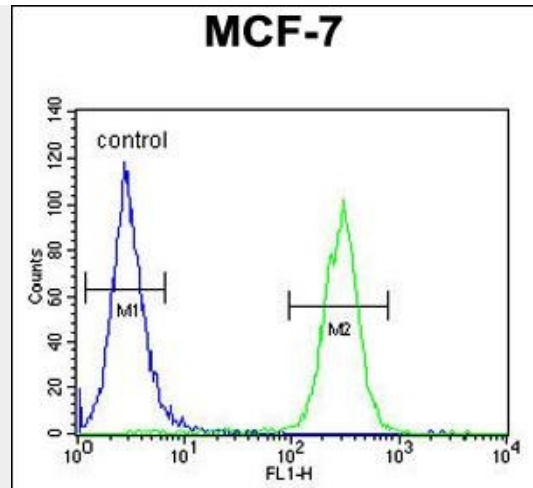
Western blot analysis of APG8b (MAP1LC3B) Antibody (T93/Y99) (Cat. #AP1802e) in MCF-7 cell line lysates (35ug/lane). MAP1LC3B (arrow) was detected using the purified Pab.



APG8b (MAP1LC3B)-T93/Y99 (Cat. #AP1802f) western blot analysis in mouse cerebellum tissue lysates (35ug/lane). This demonstrates the MAP1LC3B antibody detected MAP1LC3B protein (arrow).



APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) (Cat. #AP1802e) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) (Cat. #AP1802e) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Background**

The product of this gene is a subunit of neuronal microtubule-associated MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. Studies on the rat homolog implicate a role for this gene in autophagy, a process that involves the bulk degradation of cytoplasmic component.

#### **APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - References**

Rouschop, K.M., et al. J. Clin. Invest. 120(1):127-141(2010)  
Othman, E.Q., et al. J. Clin. Lab. Anal. 23(4):249-258(2009)  
Komatsu, M., et al. Cell 131(6):1149-1163(2007)  
Stelzl, U., et al. Cell 122(6):957-968(2005)  
Tanida, I., et al. J. Biol. Chem. 279(46):47704-47710(2004)  
He, H., et al. J. Biol. Chem. 278(31):29278-29287(2003)  
Tanida, I., et al. J. Biol. Chem. 277(16):13739-13744(2002)  
Tanida, I., et al. Biochem. Biophys. Res. Commun. 292(1):256-262(2002)  
Kabeya, Y., et al. EMBO J. 19(21):5720-5728(2000)  
Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)

#### **APG8b (MAP1LC3B)-T93/Y99 Antibody (Center) - Citations**

- [Autophagy Mediates Cytotoxicity of Human Colorectal Cancer Cells Treated with Garcinielliptone FC.](#)