

**Phospho-APG8b(MAP1LC3B)(T29) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3744a****Specification**

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**Phospho-APG8b(MAP1LC3B)(T29) Antibody - Product Information**

Application	DB,E
Primary Accession	<a href="#">O9GZQ8</a>
Other Accession	<a href="#">A6NCE7</a> , <a href="#">O62625</a> , <a href="#">O9COV6</a> , <a href="#">O41515</a> , <a href="#">NP_073729.1</a>
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	14688

**Phospho-APG8b(MAP1LC3B)(T29) Antibody - 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) Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T29 of human APG8b(MAP1LC3B).

**Dilution**

DB~~1:500

**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**

Phospho-APG8b(MAP1LC3B)(T29) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-APG8b(MAP1LC3B)(T29) Antibody - 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**

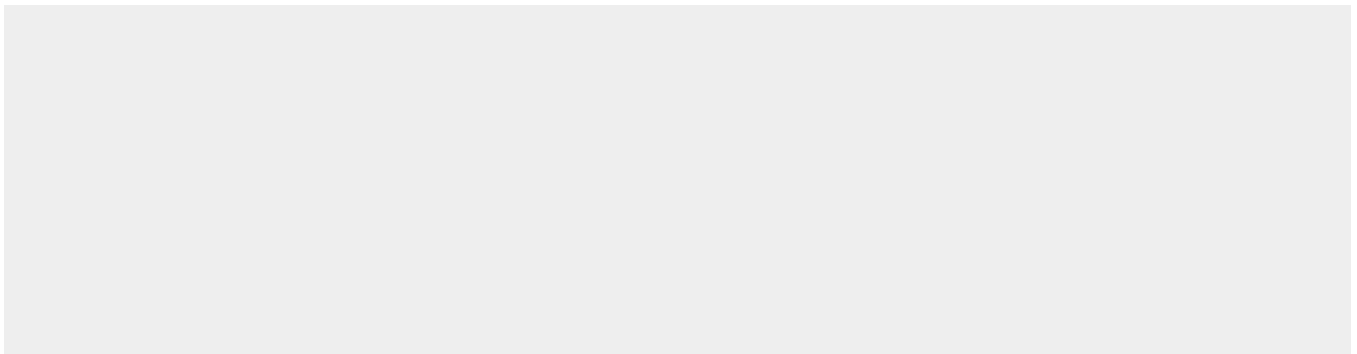
Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver

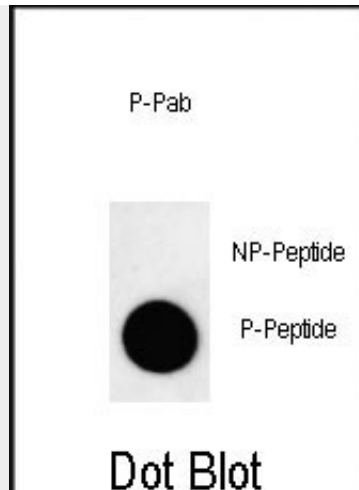
### **Phospho-APG8b(MAP1LC3B)(T29) Antibody - Protocols**

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](#)

### **Phospho-APG8b(MAP1LC3B)(T29) Antibody - Images**





Dot blot analysis of anti-Phospho-APG8b(MAP1LC3B)-T29 Antibody Phospho-specific Pab (Cat. #AP3744a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

#### **Phospho-APG8b(MAP1LC3B)(T29) Antibody - 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.

#### **Phospho-APG8b(MAP1LC3B)(T29) Antibody - References**

Rouschop, K.M., et al. J. Clin. Invest. 120(1):127-141(2010)  
Kirkin, V., et al. Mol. Cell 33(4):505-516(2009)  
Othman, E.Q., et al. J. Clin. Lab. Anal. 23(4):249-258(2009)  
Liu, Q., et al. Ai Zheng 27(1):25-29(2008)  
Komatsu, M., et al. Cell 131(6):1149-1163(2007)