

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

Specification

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

Application	DB,E
Primary Accession	Q9GZQ8
Other Accession	A6NCE7 , Q62625 , Q9COV6 , Q41515 , NP_073729.1
Reactivity Predicted	Human Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
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

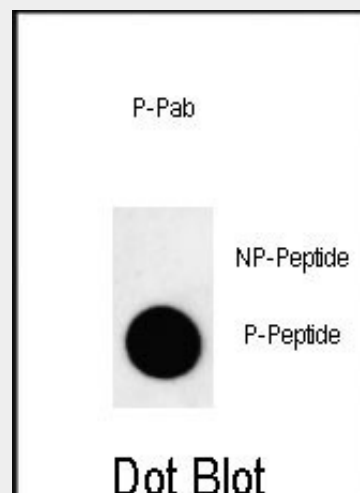
This APG8b(MAP1LC3B) Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T29 of human APG8b(MAP1LC3B).

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



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)

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.

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)

Phospho-APG8b(MAP1LC3B)(T29) Antibody - Protein Information

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

Synonyms MAP1ALC3

Function

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes). 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: [28017329](http://www.uniprot.org/citations/28017329) target="_blank">28017329). While LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation. Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway. 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: [31006538](http://www.uniprot.org/citations/31006538) target="_blank">31006538, PubMed: [31006537](http://www.uniprot.org/citations/31006537) target="_blank">31006537).

Cellular Location

Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor.

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](#)