

LC3B Polyclonal Antibody

Catalog # AP63524

Product Information

Application WB, IHC-P, IF **Primary Accession** 096Z08

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW14688

Additional Information

Gene ID 81631

Other Names MAP1LC3B; MAP1ALC3; 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

Dilution WB~~WB: 1:1000-2000 IHC: 1:200-500 IF 1:200 IHC-P~~WB: 1:1000-2000 IHC:

1:200-500 IF 1:200 IF~~1:50~200

Format PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50%

Glycerol.

Storage Conditions -20°C

Protein Information

Name MAP1LC3B (HGNC:13352)

Synonyms MAP1ALC3

Function Ubiquitin-like modifier involved in formation of autophagosomal vacuoles

(autophagosomes) (PubMed:20418806, PubMed:23209295,

PubMed:<u>28017329</u>). 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:<u>23209295</u>, PubMed:<u>28017329</u>). 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:<u>22922758</u>). 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:<u>20418806</u>, PubMed:<u>23209295</u>, PubMed:<u>28017329</u>). 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). Also localizes to discrete punctae along the ciliary axoneme

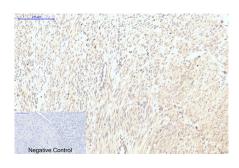
Tissue Location

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

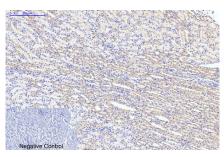
Background

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. Whereas 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.

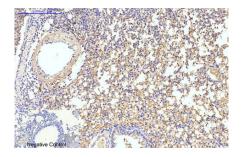
Images



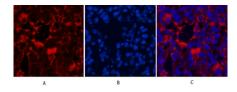
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,LC3B Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

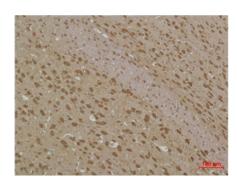


Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,LC3B Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,LC3B Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.





Immunofluorescence analysis of Mouse-lung tissue.

1,LC3B Polyclonal Antibody(red) was diluted at

1:200(4°C,overnight). 2, Cy3 labled Secondary antibody
was diluted at 1:300(room temperature, 50min).3, Picture
B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI.
Picture C: merge of A+B

Immunohistochemical analysis of paraffin-embedded Rat BrainTissue using MAP LC3β Polyclonal Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.