

# LC3B Rabbit mAb

Catalog # AP78987

#### **Product Information**

ApplicationWB, IP, ICCPrimary AccessionQ9GZQ8

Reactivity Human, Mouse, Rat

**Host** Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 14688

### **Additional Information**

**Gene ID** 81631

Other Names MAP1LC3B

**Dilution** WB~~1/500-1/1000 IP~~N/A ICC~~N/A

Format Liquid

#### **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:<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: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: <u>24089205</u>). 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;

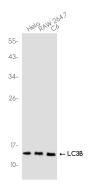
Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250 | UniProtKB:Q9CQV6}. Cytoplasmic vesicle. Note=LC3-II binds to the autophagic membranes. LC3-II localizes with the mitochondrial inner membrane during Parkin-mediated mitophagy (PubMed:28017329). Also localizes to discrete punctae along the

ciliary axoneme

#### **Tissue Location**

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

## **Images**



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