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KD-Validated Anti-MAP1LC3B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1428

Product Information

Application	WB, FC, ICC
Primary Accession	Q9GZQ8
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB3515
Calculated MW	14688
Gene Name	MAP1LC3B
Aliases	MAP1LC3B; Microtubule Associated Protein 1 Light Chain 3 Beta 2; ATG8F 2; Microtubule-Associated Proteins 1A/1B Light Chain 3B; 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; Autophagy-Related Protein LC3 B; MAP1A/1BLC3; MAP1LC3B-A; MAP1ALC3; LC3B
Immunogen	A synthesized peptide derived from human LC3B

Additional Information

Gene ID	81631
Other Names	Microtubule-associated protein 1 light chain 3 beta, Autophagy-related protein LC3 B, Autophagy-related ubiquitin-like modifier LC3 B, MAP1 light chain 3-like protein 2, Microtubule-associated proteins 1A/1B light chain 3B, MAP1A/MAP1B LC3 B, MAP1A/MAP1B light chain 3 B, MAP1LC3B (HGNC:13352), MAP1ALC3

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). 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

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