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LC3B Antibody
Rabbit mAb
Catalog # AP90990

Specification

LC3B Antibody - Product Information

Application	**WB, IHC, ICC, IP**
Primary Accession	Q9GZQ8
Reactivity	**Rat**
Clonality	**Monoclonal**
Other Names	
ATG8F; LC3B; MAP1LC3B; MLP3B; MAP1LC3B;	
Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**14688 Da**

LC3B Antibody - Additional Information

Dilution	**WB~~1:1000** **IHC~~1:100~500** **ICC~~N/A** **IP~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human LC3B**
Description	**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.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

LC3B 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). 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

LC3B 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 Cytomety
- Cell Culture

LC3B Antibody - Images

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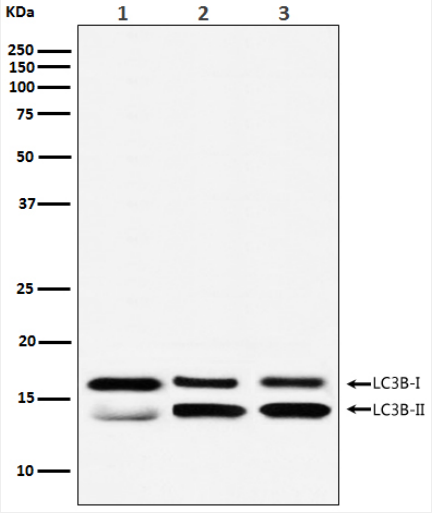

Western blot analysis of LC3B expression in (1) Human brain lysate; (2) RAW 264.7 cell lysate; (3) C6 cell lysate.