

LC3B mouse Monoclonal Antibody(9H5)
Catalog # AP63758**Specification**

LC3B mouse Monoclonal Antibody(9H5) - Product Information

Application	IHC-P
Primary Accession	O9GZQ8
Reactivity	Human
Host	Mouse
Clonality	Monoclonal

LC3B mouse Monoclonal Antibody(9H5) - Additional Information**Gene ID** 81631**Other Names**
MAP1LC3B**Dilution**
IHC-P~~N/A**Format**
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.**Storage Conditions**
-20°C**LC3B mouse Monoclonal Antibody(9H5) - Protein Information****Name** MAP1LC3B ([HGNC:13352](#))**Synonyms** MAP1ALC3**Function**

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed: [20418806](http://www.uniprot.org/citations/20418806), PubMed: [23209295](http://www.uniprot.org/citations/23209295), PubMed: [28017329](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/23209295), PubMed: [28017329](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/20418806))

target="_blank">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

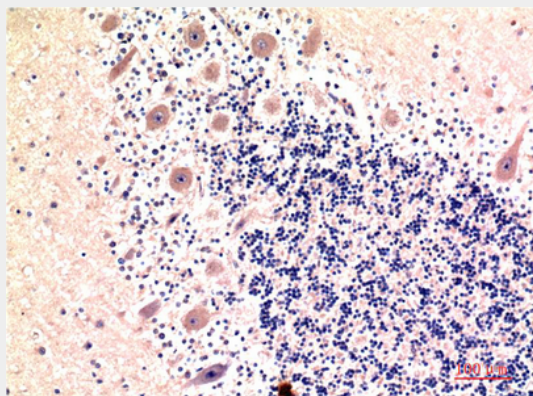
Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver

LC3B mouse Monoclonal Antibody(9H5) - 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](#)

LC3B mouse Monoclonal Antibody(9H5) - Images



Immunohistochemical analysis of paraffin-embedded Human Brain Tissue using LC3B Mouse mAb diluted at 1:200.

LC3B mouse Monoclonal Antibody(9H5) - 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.