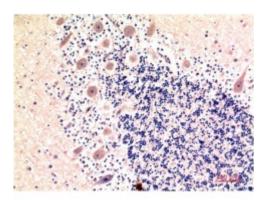


Anti-LC3B antibody





Description	Mouse monoclonal to LC3B.

Model STJ97748

Host Mouse

Reactivity Human

Applications IHC

Immunogen Recombinant peptide derived from LC3B

Gene ID 81631

Gene Symbol MAP1LC3B

Dilution range IHC 1:100-200

Specificity LC3B Mouse Monoclonal Antibody (9H5) detects endogenous levels of

MAP1LC3B

Tissue Specificity Most abundant in heart, brain, skeletal muscle and testis. Little expression

observed in liver.

Purification The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID 9H5

Note For Research Use Only (RUO).

Protein Name 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 Microt

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:13352OMIM:609604

Alternative Names 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 Microt

Function 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.

Cellular Localization Cytoplasm, cytoskeleton. Endomembrane system. Lipid-anchor. Cytoplasmic

vesicle, autophagosome membrane. Lipid-anchor. Cytoplasmic vesicle, autophagosome. LC3-II binds to the autophagic membranes. Localizes also to

discrete punctae along the ciliary axoneme.

Post-translational The precursor molecule is cleaved by ATG4B to form the cytosolic form,

LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and

conjugated to phospholipid to form the membrane-bound form, LC3-II. The Legionella effector RavZ is a deconjugating enzyme that produces an ATG8 product that would be resistant to reconjugation by the host machinery due to the cleavage of the reactive C-terminal glycine.; Phosphorylation at Thr-12 by PKA inhibits conjugation to phosphatidylethanolamine (PE). Interaction with MAPK15 reduces the inhibitory phosphorylation and increases autophagy

activity.

Modifications