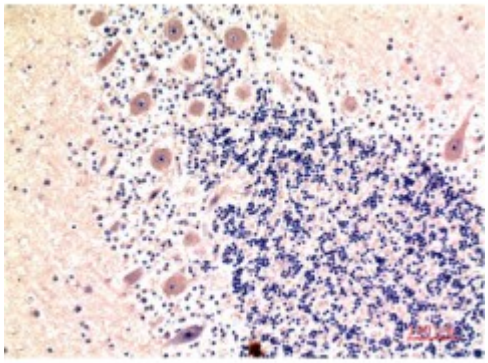
Anti-LC3B antibody



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 Modifications	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.