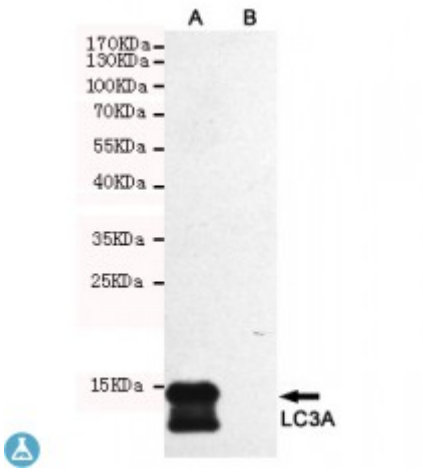
Anti-LC3A antibody



Description	Mouse monoclonal to LC3A.

Model	STJ99258
Host	Mouse
Applications	ELISA, WB
Immunogen	Recombinant peptide derived from human LC3A.
Gene ID	84557
Gene Symbol	MAP1LC3A
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	Transfected Only.
Tissue Specificity	Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	4C8-B7-B9
Note	For Research Use Only (RUO).
Protein Name	Microtubule-associated proteins 1A/1B light chain 3A Autophagy-related protein LC3 A Autophagy-related ubiquitin-like modifier LC3 A MAP1 light chain 3-like protein 1 MAP1A/MAP1B light chain 3 A MAP1A/MAP1B LC3 A Microt
Molecular Weight	14/16kDa

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:6838OMIM:601242
Alternative Names	Microtubule-associated proteins 1A/1B light chain 3A Autophagy-related protein LC3 A Autophagy-related ubiquitin-like modifier LC3 A MAP1 light chain 3-like protein 1 MAP1A/MAP1B light chain 3 A MAP1A/MAP1B LC3 A Microt
Function	Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) . Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation .
Cellular Localization	Cytoplasm, cytoskeleton. Endomembrane system. Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane. Lipid-anchor. Cytoplasmic vesicle, autophagosome. LC3-II binds to the autophagic membranes.
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 Ser-12 by PKA inhibits conjugation to phosphatidylethanolamine (PE). Interaction with MAPK15 reduces the inhibitory phosphorylation and increases autophagy activity.