10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LC3A Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52856

Product Information

Primary Accession	Q9H492
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	14272

Additional Information

Gene ID	84557
Other Names	ATG8F; Autophagy related protein LC3 A; Autophagy related protein LC3 B; Autophagy related ubiquitin like modifier LC3 A; Autophagy related ubiquitin like modifier LC3 B; Autophagy-related protein LC3 B; Autophagy-related ubiquitin-like modifier LC3 B; LC3; MAP1 light chain 3 like protein 1; MAP1 light chain 3 like protein 2; MAP1 light chain 3-like protein 2; MAP1A/1B light chain 3 A; MAP1A/1B light chain 3 B; MAP1A/1BLC3; MAP1A/MAP1B LC3 A; MAP1A/MAP1B LC3 B; MAP1A/MAP1B light chain 3 B; MAP1ALC3; MAP1BLC3; MAP1LC3A; MAP1LC3B; Microtubule associated protein 1 light chain 3 alpha; Microtubule associated protein 1 light chain 3 beta; Microtubule associated proteins 1A/1B light chain 3; Microtubule associated proteins 1A/1B light chain 3A; Microtubule associated proteins 1A/1B light chain 3B; Microtubule-associated protein 1 light chain 3 beta; Microtubule-associated proteins 1A/1B light chain 3B; MLP3B_HUMAN.
Format	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	MAP1LC3A
Function	Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:20713600, PubMed:24290141). 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:20713600). 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).

Cellular Location	Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Endomembrane system; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91VR7}. Note=LC3-II binds to the autophagic membranes.
Tissue Location	Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes

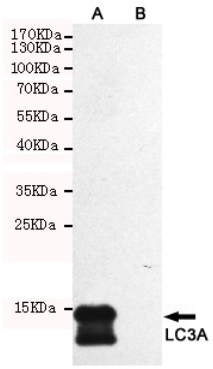
Background

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.

References

He H.,et al.J. Biol. Chem. 278:29278-29287(2003).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot detection of LC3A in CHO-K1 cell lysate(B)and CHO-K1 transfected by LC3A (A)cell lysate using LC3A mouse mAb (1:2000 diluted).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.