

LC3A Rabbit mAb

Catalog # AP75690

Product Information

Application	WB, IHC-P, FC
Primary Accession	Q9H492
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	14272

Additional Information

Gene ID	84557
Other Names	MAP1LC3A
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:50-1:500
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
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.

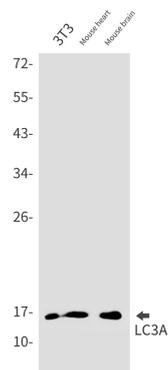
Tissue Location

Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes

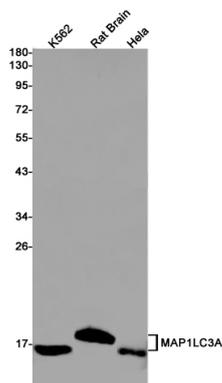
Background

Autophagy marker Light Chain 3 (LC3) was originally identified as a subunit of microtubule-associated proteins 1A and 1B (termed MAP1LC3), and subsequently found to contain similarity to the yeast protein Apg8/Aut7/Cvt5 critical for autophagy. Three human LC3 isoforms (LC3A, LC3B, and LC3C) undergo post-translational modifications during autophagy. Cleavage of LC3 at the carboxy terminus immediately following synthesis yields the cytosolic LC3-I form.

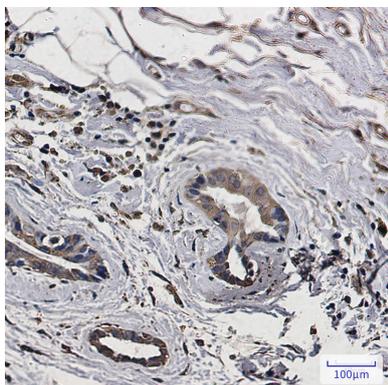
Images



Western blot analysis of LC3A in 3T3, mouse heart, mouse brain lysates using LC3A antibody.



Western blot analysis of LC3A in K562, rat Brain, Hela lysates using LC3A antibody.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using LC3A antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

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