

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1011

Specification

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, ICC <u>O9H492</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 14 kDa, observed, 14,16 kDa KDa
Gene Name	MAP1LC3A
Aliases	MAP1LC3A; Microtubule Associated Protein 1 Light Chain 3 Alpha; MAP1BLC3; MAP1ALC3; ATG8E; LC3A; LC3; Microtubule-Associated Proteins 1A/1B Light Chain 3A; Autophagy-Related Ubiquitin-Like Modifier LC3 A; MAP1 Light Chain 3-Like Protein 1; MAP1A/MAP1B Light Chain 3 A; MAP1A/MAP1B LC3 A; Microtubule-Associated Protein 1 Light Chain 3 Alpha; Microtubule-Associated Proteins 1A/1B Light Chain 3; Autophagy-Related Protein LC3 A;
Immunogen	MAP1A/1B Light Chain 3 A A synthesized peptide derived from human MAP1LC3A

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody - Additional Information

Gene ID 84557 Other Names Microtubule-associated protein 1 light chain 3 alpha, Autophagy-related protein LC3 A, Autophagy-related ubiquitin-like modifier LC3 A, MAP1 light chain 3-like protein 1, Microtubule-associated proteins 1A/1B light chain 3A, MAP1A/MAP1B LC3 A, MAP1A/MAP1B light chain 3 A, MAP1LC3A

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody - 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

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-MAP1LC3A Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-MAP1LC3A antibody (Cat#AGI1011). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MAP1LC3A antibody (Cat#AGI1011, 1:20,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.





Western blotting analysis using anti-MAP1LC3A antibody (Cat.#AGI1011). MAP1LC3A expression in wild type (WT) and MAP1LC3A shRNA knockdown (KD) HeLa cells with 30 μ g of Total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-MAP1LC3A antibody (Cat.#AGI1011, 1:20,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.



Immunocytochemical staining of C2C12 cells with MAP1LC3A antibody (Cat#AGI1011, 1:1,000). Nuclei were stained blue with DAPI; MAP1LC3A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.