

DATASHEET

LC3B Rabbit Polyclonal Antibody

CAT. NO. APA12463

KEY FEATURES

| | | | |
|---------------|---|---------------|---------------------|
| Target | LC3B | Source / Host | Rabbit |
| Reactivity | Human, Mouse, Rat | Clonality | Polyclonal |
| Applications | WB, IHC, IF/ICC | Conjugation | Unconjugated |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. | | Storage at -20°C |

BACKGROUND

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 . In response to cellular stress and upon mitochondria fission, binds C-18 ceramides and anchors autophagolysosomes to outer mitochondrial membranes to eliminate damaged mitochondria . While 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 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

| | |
|--------|-----------------|
| WB | 1:1000 - 1:2000 |
| IHC | 1:200 - 1:500 |
| IF/ICC | 1:100 - 1:200 |

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

| | |
|-------------------|--|
| Description | Rabbit polyclonal antibody to LC3B |
| Specificity | Recognizes endogenous levels of LC3B protein. |
| Antibody Type | Primary antibody |
| Immunogen | Recombinant protein corresponding to human LC3B. |
| Purification | The antibody was purified by immunogen affinity chromatography. |
| Molecular Weight | Predicted: 14 kD; Observed: 14; 16 kD |
| Form/Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| Alternative Names | MAP1ALC3; 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; Microtubule-associated protein 1 light chain 3 beta |
| Gene Symbol | MAP1LC3B |
| Entrez Gene | 81631(Human); 67443(Mouse); 64862(Rat) |
| SwissProt | Q9GZQ8(Human); Q9CQV6(Mouse); Q62625(Rat) |

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

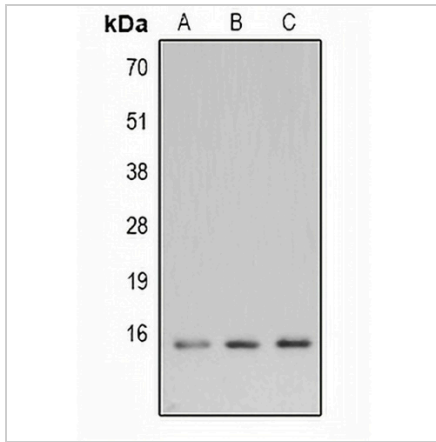
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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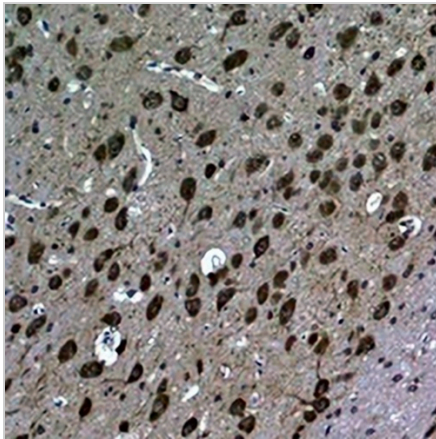
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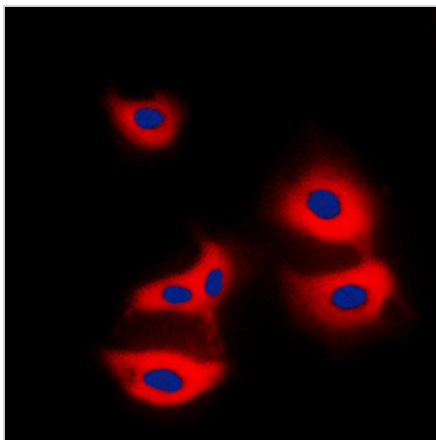
DATA



Western blot analysis of LC3B expression in HeLa (A), NIH3T3 (B), rat brain (C) whole cell lysates. (Predicted band size: 14 kD; Observed band size: 14; 16 kD)



Immunohistochemical analysis of LC3B staining in rat brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of LC3B staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.