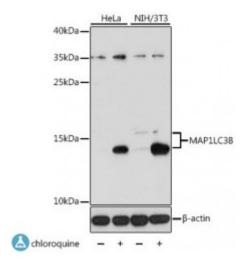


Anti-MAP1LC3B Antibody



Description The product of this gene is a subunit of neuronal microtubule-associated

MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. Studies on the rat homolog implicate a role for this gene in autophagy, a process that involves the bulk

degradation of cytoplasmic component.

Model STJ117779

Host Rabbit

Reactivity Human, Mouse

Applications IF, IHC, WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-125 of human MAP1LC3B (NP_073729.1).

Gene ID 81631

Gene Symbol MAP1LC3B

Dilution range WB 1:500 - 1:2000

IHC 1:50 - 1:200 IF 1:50 - 1:200

Tissue Specificity Most abundant in heart, brain, skeletal muscle and testis, Little expression

observed in liver

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name 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 Microt

Molecular Weight 14.688 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links <u>HGNC:13352OMIM:609604Reactome:R-HSA-1632852</u>

Alternative Names 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 Microt

Function 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, Whereas 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,

Cellular Localization Cytoplasm, cytoskeleton, Endomembrane system

Post-translational The precursor molecule is cleaved by ATG4B to form the cytosolic form,

Modifications LC3-I, This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II,

Interaction with MAPK15 reduces the inhibitory phosphorylation and

increases autophagy activity,

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