Datasheet for ABIN1385814
anti-LC3B antibody

Overview

Quantity: 100 μL
Target: LC3B (MAP1LC3B)
Reactivity: Human, Mouse, Rat
Host: Rabbit
Clonality: Polyclonal
Conjugate: This LC3B antibody is un-conjugated
Application: Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen: KLH conjugated synthetic peptide derived from human Microtubule-associated proteins 1A/1B light chain 3B
Isotype: IgG
Purification: Purified by Protein A.

Target Details

Target: LC3B (MAP1LC3B)
Alternative Name: Lc3b (MAP1LC3B Products)
Background: Microtubule-associated proteins (MAPs) regulate microtubule stability and play critical roles in neuronal development and in maintaining the balance between neuronal plasticity and rigidity. MAP-light chain 3 beta (MAP-LC3 Beta) and MAP-light chain 3 alpha (MAP-LC3 Alpha) are
**Target Details**

Subunits of both MAP1A and MAP1B. MAP-LC3 Beta, a homolog of Apg8p, is essential for autophagy and associated to the autophagosome membranes after processing. Two forms of LC3 Beta, the cytosolic LC3-I and the membrane-bound LC3-II, are produced post-translationally. LC3-I is formed by the removal of the C-terminal 22 amino acids from newly synthesized LC3 Beta, followed by the conversion of a fraction of LC3-I into LC3-II. LC3 enhances fibronectin mRNA translation in ductus arteriosus cells through association with 60S ribosomes and binding to an AU-rich element in the 3' untranslated region of fibronectin mRNA. This facilitates sorting of fibronectin mRNA onto rough endoplasmic reticulum and translation. MAP LC3 Beta may also be involved in formation of autophagosomal vacuoles. It is expressed primarily in heart, testis, brain and skeletal muscle.

**Synonyms:** Microtubule-associated protein 1 light chain 3 beta, ATG8F, Autophagy related protein LC3 B, Autophagy related ubiquitin like modier LC3 B, Autophagy-related protein LC3 B, Autophagy-related ubiquitin-like modier LC3 B, MAP1 light chain 3 like protein 2, MAP1 light chain 3-like protein 2, MAP1A/1B light chain 3 B, MAP1A/1BLC3, MAP1A/MAP1B LC3 B, MAP1A/MAP1B light chain 3 B, MAP1ALC3, MAP1LC3B, Microtubule associated protein 1 light chain 3 beta, 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.

**Pathways:** Autophagy

**Application Details**

**Application Notes:**

WB: 1:100-1000, IHC-P: 1:100-500, IF(IHC-P): 1:50-200

**Optimal working dilution should be determined by the investigator.**

**Restrictions:** For Research Use only

**Handling**

**Format:** Liquid

**Concentration:** 1 μg/μL

**Buffer:** Aqueous buffered solution containing 100 μg/mL BSA, 50 % glycerol and 0.09 % sodium azide.

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling

<table>
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Images

**Western Blotting**

**Image 1.** The time courses of autophagy in EBI after experimental SAH. (A) The relative densities of Beclin-1 and LC3B-II were quantified by western blot. (B) The band intensities were increased in the SAH-6H group and peaked in the SAH-24H group, as the quantitative results shown. *P < 0.05 and ##P < 0.01 vs. sham group, n = 5 animals per group. - figure provided by CiteAb. Source: PMID29556174

**Western Blotting**

**Image 2.** Autophagy of mice brain and neuron with the administration of COG1410. (A,B) The band intensities of Beclin-1 and LC3B-II were conspicuously increased in the SAH group compared with the Sham group, and further enhanced in the COG1410 group compared to the SAH group. No significant differences were observed between the SAH+Saline group and the SAH group, the relevant results are shown in the quantification (n = 6 animals per group). (C-E) The co-staining of NeuN with Beclin-1 and LC3B-II is indicated by white arrow heads and amplified in the upper-right corners of the merged images, and the relevant bio-markers are shown in the two smaller pictures below. The number of co-stained cells was also prominently increased in the SAH group and increased further in the SAH+COG1410 group (n = 6 animals per group). **P < 0.01 vs. the sham group, #P < 0.05 vs. the SAH group. - figure provided by CiteAb. Source: PMID29556174
Immunofluorescence (Paraffin-embedded Sections)

**Image 3.** Autophagy of mice brain and neuron with the administration of COG1410. (A,B) The band intensities of Beclin-1 and LC3B-II were conspicuously increased in the SAH group compared with the Sham group, and further enhanced in the COG1410 group compared to the SAH group. No significant differences were observed between the SAH+Saline group and the SAH group, the relevant results are shown in the quantification (n = 6 animals per group). (C-E) The co-staining of NeuN with Beclin-1 and LC3B-II is indicated by white arrow heads and amplified in the upper-right corners of the merged images, and the relevant bio-markers are shown in the two smaller pictures below. The number of co-stained cells was also prominently increased in the SAH group and increased further in the SAH+COG1410 group (n = 6 animals per group). **P < 0.01 vs. the sham group, #P < 0.05 vs. the SAH group. - figure provided by CiteAb. Source: PMID29556174**

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN1385814.