

MAP1LC3C Antibody

Catalog # ASC11728

Specification

MAP1LC3C Antibody - Product Information

Application WB, IHC, IF Primary Accession Other Accession

Q9BXW4 NP 001004343,

51972260 Human Reactivity Host Rabbit Clonality **Polvclonal** Isotype laG

Calculated MW Predicted: 16 kDa

Observed: 16 kDa

KDa

Application Notes

MAP1LC3C antibody can be used for detection of MAP1LC3C by Western blot at 1 - 2 μg/ml.

Antibody can also be used for Immu nohistochemistry starting at 5 μg/mL. For immun ofluorescence start at 20 µg/mL.

MAP1LC3C Antibody - Additional Information

Gene ID 440738

Target/Specificity

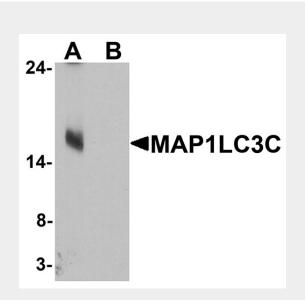
MAP1LC3C; MAP1LC3C antibody is human, mouse and rat reactive. Multiple isoforms MAP1LC3C are known to exist. MAP1LC3C antibody is predicted to not cross-react with MAP1LC3A or MAP1LC3B.

Reconstitution & Storage

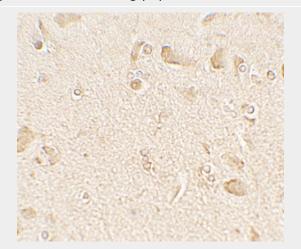
MAP1LC3C antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

MAP1LC3C Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Western blot analysis of MAP1LC3C in human brain tissue lysate with MAP1LC3C antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of MAP1LC3C in human brain tissue with MAP1LC3C antibody at 5 µg/mL.



MAP1LC3C Antibody - Protein Information

Name MAP1LC3C

Function

Ubiquitin-like modifier that plays a crucial role in antibacterial autophagy (xenophagy) through the selective binding of CALCOCO2. Recruits all ATG8 family members to infecting bacteria such as S.Typhimurium (PubMed:23022382" target="_blank">23022382). May also play a role in aggrephagy, the macroautophagic degradation of ubiquitinated and aggregated proteins (PubMed:28404643).

Cellular Location

Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Cytoplasmic vesicle, autophagosome. Note=LC3-II binds to the autophagic membranes

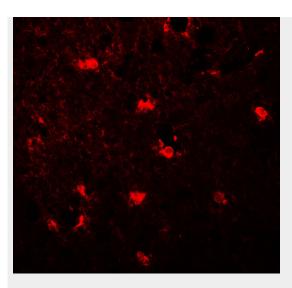
Tissue Location

Most abundant in placenta, lung and ovary.

MAP1LC3C Antibody - Protocols

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

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



Immunofluorescence of MAP1LC3C in human brain tissue with MAP1LC3C antibody at 20 μ g/mL.

MAP1LC3C Antibody - Background

Microtubule-associated proteins (MAPs) regulate microtubule stability and play critical roles in neuronal development and plasticity (1). MAP1LC3C belongs to the MAP1 LC3 family of proteins that form mature complexes with MAP1A and MAP1B which are thought to be important in the formation and development of axons and dendrites (2). MAP1LC3C is one of three isoforms of MAP1LC3, the mammalian homolog of yeast ATG8, an essential autophagy protein. These isoforms exhibit distinct expression patterns and MAP1LC3C, like MAP1LC3A but not MAP1LC3B, is post-translationally modified, suggesting the three isoforms may have different physiological functions (3).

MAP1LC3C Antibody - References

Mandelkow E and Mandelkow EM.
Microtubules and microtubule-associated
proteins. Curr. Opin. Cell Biol. 1995; 7:72-81.
Halpain S and Dehmelt L. The MAP1 family of
microtubule-associated proteins. Genome Biol.
2006; 7:224.

He H, Dang Y, Dai F, et al. Post-translational modifications of three members of the human MAP1LC3 family and detection of a novel type of modification for MAP1LC3B. J. Biol. Chem. 2003; 278:29278-87.