



Rabbit Anti-MAP1LC3C polyclonal antibody (CABT-RM102)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects LC3C.
Target	MAP1LC3C
Immunogen	GST-tagged full-length human recombinant Microtubule-associated proteins 1A/1B light chain 3C (LC3C).
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Rat
Purification	Affinity Purified
Conjugate	unconjugated
Applications	WB, IHC
Molecular Weight	~17 kDa observed; 16.85 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	200 µl
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction

Microtubule-associated proteins 1A/1B light chain 3C is encoded by the MAP1LC3C gene in human. LC3s (MAP1-LC3A, B and C) are structural proteins of autophagosomal membranes, widely used as biomarkers of autophagy. LC3A is mainly localized to perinuclear and nuclear regions, LC3B is evenly distributed throughout the cytoplasm and is also localized in the nucleolar regions, and LC3C is shown to be located in the cytoplasm and strongly in the nuclei. LC3C is synthesized with a propeptide (aa 127-147), which is removed in the mature form. LC3C is a ubiquitin-like modifier that plays a crucial role in antibacterial autophagy through the selective binding of CALCOCO2. It recruits all ATG8 family members to infecting bacteria such as S.Typhimurium. It is also reported to play a role in aggrephagy, the macroautophagic degradation of ubiquitinated and aggregated proteins. LC3C is recruited to damaged mitochondria where it mediates autophagosomal degradation of mitochondrial parts in a piecemeal fashion and is required for maintaining basal mitochondrial network homeostasis. It also mediates autophagosomal degradation of MTX1 protein and cooperates with p62 to deliver MTX1 to lysosomes.

Keywords

MAP1LC3C; microtubule-associated protein 1 light chain 3 gamma; LC3C; ATG8J; microtubule-associated proteins 1A/1B light chain 3C; MAP1A/MAP1B LC3 C; LC3-like protein 2; MAP1A/MAP1B light chain 3 C; autophagy-related protein LC3 C; MAP1 light chain 3-like protein 2

GENE INFORMATION

Entrez Gene ID [440738](#)

UniProt ID [Q9BXW4](#)