

Phospho-MAP1LC3A(S12) Blocking Peptide
Synthetic peptide
Catalog # BP3848a**Specification**

Phospho-MAP1LC3A(S12) Blocking Peptide - Product Information

Primary Accession [O9H492](#)
Other Accession [O6XVN8](#), [Q91VR7](#), [Q2HJ23](#), [NP_115903.1](#),
[NP_852610.1](#), [O6NX90](#)

Phospho-MAP1LC3A(S12) Blocking Peptide - Additional Information

Gene ID 84557

Other Names

Microtubule-associated proteins 1A/1B light chain 3A, Autophagy-related protein LC3 A, Autophagy-related ubiquitin-like modifier LC3 A, MAP1 light chain 3-like protein 1, MAP1A/MAP1B light chain 3 A, MAP1A/MAP1B LC3 A, Microtubule-associated protein 1 light chain 3 alpha, MAP1LC3A

Target/Specificity

The synthetic peptide sequence is selected from aa 6-16 of HUMAN MAP1LC3A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MAP1LC3A(S12) Blocking Peptide - Protein Information

Name MAP1LC3A ([HGNC:6838](#))

Function

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:20713600, PubMed:24290141). While LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:20713600). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:31006538, PubMed:31006537).

Cellular Location

Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Endomembrane system; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91VR7}. Note=LC3-II binds to the autophagic membranes.

Tissue Location

Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes

Phospho-MAP1LC3A(S12) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-MAP1LC3A(S12) Blocking Peptide - Images**Phospho-MAP1LC3A(S12) Blocking Peptide - Background**

MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. The protein encoded by this gene is one of the light chain subunits and can associate with either MAP1A or MAP1B. Two transcript variants encoding different isoforms have been found for this gene.

Phospho-MAP1LC3A(S12) Blocking Peptide - References

Scherz-Shouval, R., et al. Proc. Natl. Acad. Sci. U.S.A. 107(43):18511-18516(2010)
Cherra, S.J. III, et al. J. Cell Biol. 190(4):533-539(2010)
Gao, C., et al. Nat. Cell Biol. 12(8):781-790(2010)
Namgoong, G.M., et al. J. Biol. Chem. 285(31):23829-23841(2010)
Jiang, H., et al. Biochem. Biophys. Res. Commun. 395(4):471-476(2010)