

LC3 Antibody (APG8c) (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1804a

Specification

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Product Information

Primary Accession

Q9BXW4

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Additional Information

Gene ID 440738

Other Names

Microtubule-associated proteins 1A/1B light chain 3C, Autophagy-related protein LC3 C, Autophagy-related ubiquitin-like modifier LC3 C, MAP1 light chain 3-like protein 3, MAP1A/MAP1B light chain 3 C, MAP1A/MAP1B LC3 C, Microtubule-associated protein 1 light chain 3 gamma, MAP1LC3C

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1804a was selected from the N-terminal region of human LC3 (APG8c). A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Protein Information

Name MAP1LC3C

Function

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

Cellular Location



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

Tissue Location

Most abundant in placenta, lung and ovary.

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Images

LC3 Antibody (APG8c) (N-term) Blocking Peptide - Background

Autophagy is a process of intracellular bulk degradation in which cytoplasmic components including organelles are sequestered within double-membrane vesicles that deliver the contents to the lysosome/vacuole for degradation. There are three primary forms of autophagy: chaperone-mediated autophagy, microautophagy and macroautophagy. During macroautophagy, the sequestering vesicles, termed autophagosomes, fuse with the lysosome or vacuole resulting in the delivery of an inner vesicle (autophagic body) into the lumen of the degradative compartment. There are 16 proteins participating in autophagy pathway in human (http://ca.expasy.org/cgi-bin/get-entries? KW=Autophagy&view=tree). Abgent?s exclusive product line for autophagy research, 2-4 epitopes for each protein, provides antibodies against each protein in the pathway.

LC3 Antibody (APG8c) (N-term) Blocking Peptide - References

Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005) Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005) Greenberg JT. Dev Cell. 8(6):799-801. (2005) Levine B. Cell. 120(2):159-62. (2005) Shintani T and Klionsky DJ. Science. 306(5698):990-5. (2004)Tanida I., et al. Int. J. Biochem. Cell Biol. 36:2503-2518(2004)He H., et al. J. Biol. Chem. 278:29278-29287(2003) Tanida I., et al. J. Biol. Chem. 279:36268-36276(2004)