

LC3 Antibody (APG8a) (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1801a**Specification**

LC3 Antibody (APG8a) (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9H492](#)**LC3 Antibody (APG8a) (N-term) 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 used to generate the antibody [AP1801a](/product/products/AP1801a) was selected from the N-terminal region of human LC3 (APG8a). 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 (APG8a) (N-term) Blocking Peptide - Protein Information**Name** MAP1LC3A ([HGNC:6838](#))**Function**

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed: [20713600](http://www.uniprot.org/citations/20713600), PubMed: [24290141](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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: [20713600](#)).

href="http://www.uniprot.org/citations/31006538" target="_blank">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

LC3 Antibody (APG8a) (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

LC3 Antibody (APG8a) (N-term) Blocking Peptide - Images**LC3 Antibody (APG8a) (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 (APG8a) (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)