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LC3A Antibody
Catalog # ASM10502

Specification

LC3A Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9H492
Other Accession	NP_115903.1
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**

Description
Rabbit Anti-Human LC3A Polyclonal

Target/Specificity
Detects ~14 kDa. Band at 50 kDa is LC3A complex.

Other Names
MAP1 light chain 3 like protein 1 Antibody, Map1lc3a Antibody, MAP1BLC3 Antibody, Autophagy-related ubiquitin-like modifier LC3 A Antibody, MAP1LC3A Antibody, LC3A Antibody, Microtubule-associated proteins 1A and 1B, light chain 3 Antibody, MAP1ALC3 Antibody, MAP1A/1B light chain 3 A Antibody, MAP1A/MAP1B light chain 3 A Antibody, Microtubule-associated protein 1 light chain 3 alpha Antibody, LC3 Antibody, Microtubule-associated proteins 1A/1B light chain 3A Antibody, Autophagy-related protein LC3 A Antibody, MAP1A/MAP1B LC3 A Antibody, ATG8E Antibody, MLP3A_HUMAN Antibody, MAP1 light chain 3-like protein 1 Antibody, Microtubule associated proteins 1A/1B light chain 3 Antibody,

Immunogen
Synthetic peptide from the N-terminal of Human LC3A (aa. 1-12)

Purification
Peptide Affinity Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:1000 dilution of SPC-613 was sufficient for detection of LC3A in 15 µg of Human HeLa Cell Lysates by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

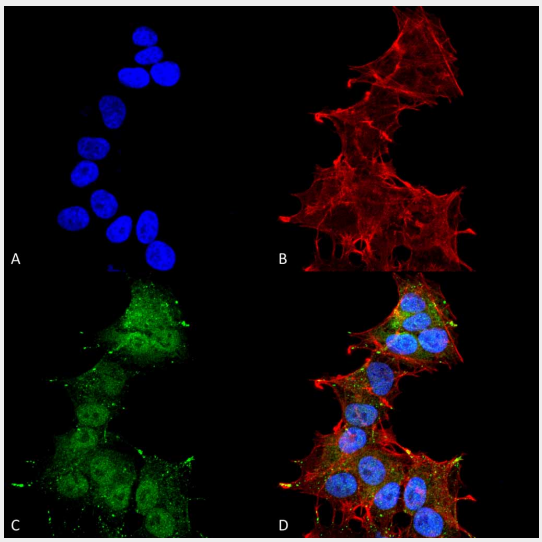
Cellular Localization
Cytoplasm | Cytoskeleton | Endomembrane System | Lipid-Anchor | Cytoplasmic Vesicle | Autophagosome Membrane | Lipid-Anchor | Cytoplasmic Vesicle | Autophagosome

LC3A Antibody - Protocols

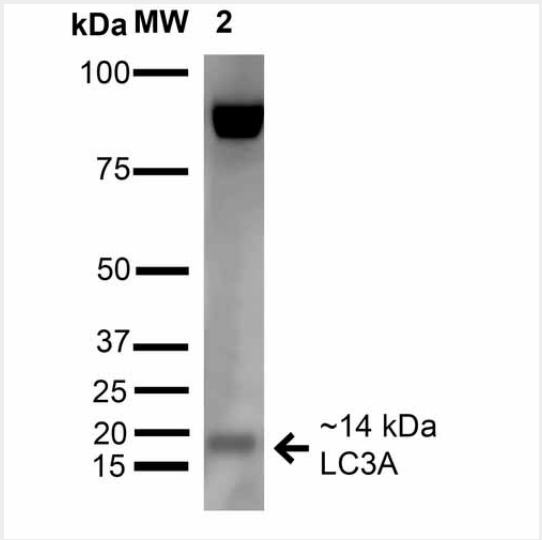
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LC3A Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-LC3A Polyclonal Antibody (ASM10502). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-LC3A Polyclonal Antibody (ASM10502) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm, Autophagosome, Cytoplasmic Vesicle. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) LC3A Antibody (D) Composite.



Western blot analysis of Rat Liver cell lysates showing detection of 14 kDa LC3A protein using

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Rabbit Anti-LC3A Polyclonal Antibody (ASM10502). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Liver cell lysates. Load: 15 µg . Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-LC3A Polyclonal Antibody (ASM10502) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: 14 kDa.

LC3A Antibody - Background

Light chain 3 (LC3) is a microtubule-associated protein with an approximate molecular mass of 17kDa, and can be found ubiquitously throughout mammalian tissue. LC3 plays a role in autophagy; once the autophagic process is initiated in a cell, LC3 is conjugated to phosphatidylethanolamine to form LC3-II. This molecule is recruited to the autophagosome at the time of fusion with lysosomes, and LC3-II in autolysosomal lumen is degraded. Therefore, monitoring LC3 is an important tool for detecting autophagy and autophagy-related processes. LC3A is one of three isoforms which exhibits abundant expression in the heart, brain, liver, skeletal muscle, and testis but is absent in thymus and peripheral blood leukocytes.

LC3A Antibody - References

1. Tanida I., Ueno T., & Kominami E. (2008) Methods Mol Biol. 445:77-88.
2. He H., et al. (2003) J Biol Chem. 278(31): 29278-87.