

**LC3A Antibody**  
**Catalog # ASM10502****Specification****LC3A Antibody - Product Information**

Application	<b>WB, ICC</b>
Primary Accession	<a href="#">Q9H492</a>
Other Accession	<a href="#">NP_115903.1</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
<b>Description</b>	
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 **-20°C**

**Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

**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**

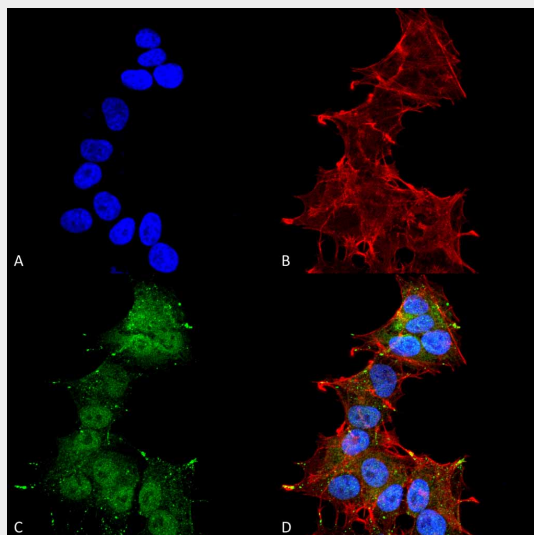
Cytoplasm | Cytoskeleton | Endomembrane System | Lipid-Anchor | Cytoplasmic Vesicle | Autophagosome Membrane | Lipid-Anchor | Cytoplasmic Vesicle | Autophagosome

**LC3A Antibody - Protocols**

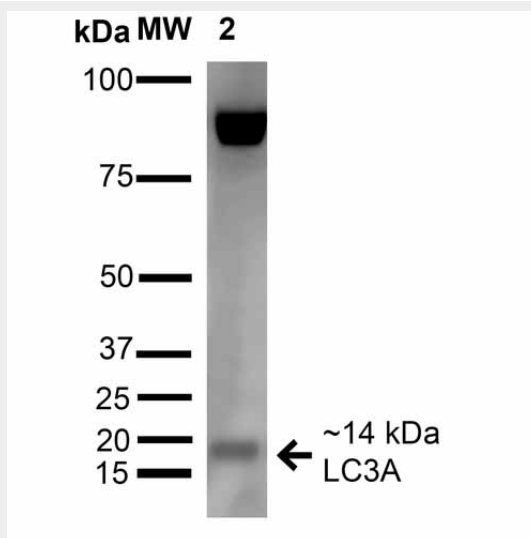
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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

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.