

## ARG51300 anti-LC3A antibody

Package: 100 µl, 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes LC3A
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LC3A
Species	Human
Immunogen	Peptide sequence around aa.5~10 (R-P-F-K-Q) derived from Human LC3A.
Conjugation	Un-conjugated
Alternate Names	MAP1A/MAP1B light chain 3 A; MAP1BLC3; LC3; MAP1 light chain 3-like protein 1; MAP1A/MAP1B LC3 A; Autophagy-related protein LC3 A; Microtubule-associated protein 1 light chain 3 alpha; MAP1ALC3; Microtubule-associated proteins 1A/1B light chain 3A; LC3A; ATG8E; Autophagy-related ubiquitin-like modifier LC3 A

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	Assay-dependent
	WB	1:500 - 1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic peptide. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Buffer	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

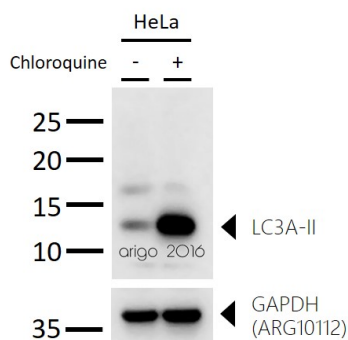
#### Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

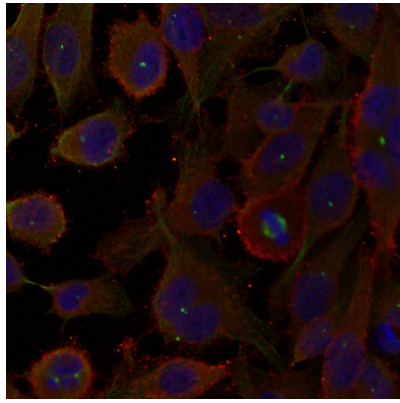
Gene Symbol	MAP1LC3A
Gene Full Name	microtubule-associated protein 1 light chain 3 alpha
Background	Probably involved in formation of autophagosomal vacuoles (autophagosomes).
Function	Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes). Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation. [UniProt]
Highlight	Related Antibody Duos and Panels: <a href="#">ARG30273 LC3A and LC3B Antibody Duo</a> Related products: <a href="#">LC3A antibodies</a> ; <a href="#">LC3A Duos / Panels</a> ; <a href="#">Anti-Rabbit IgG secondary antibodies</a> ; Related news: <a href="#">Understanding Your Cells: Choose the right markers</a> <a href="#">Freeze! Scientists found a way to stop tumor migration</a> <a href="#">A non-autophagic role of Atg9a in necrosis and developmental bone formation</a>
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	14 kDa
PTM	The precursor molecule is cleaved by ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II (PubMed:15187094). The Legionella effector RavZ is a deconjugating enzyme that produces an ATG8 product that would be resistant to re-conjugation by the host machinery due to the cleavage of the reactive C-terminal glycine. Phosphorylation at Ser-12 by PKA inhibits conjugation to phosphatidylethanolamine (PE). Interaction with MAPK15 reduces the inhibitory phosphorylation and increases autophagy activity.

## Images



ARG51300 anti-LC3A antibody WB image

Western blot: 30 µg of HeLa untreated or treated with CQ (50 µM) and stained with ARG51300 anti-LC3A antibody at 1:1000 dilution.



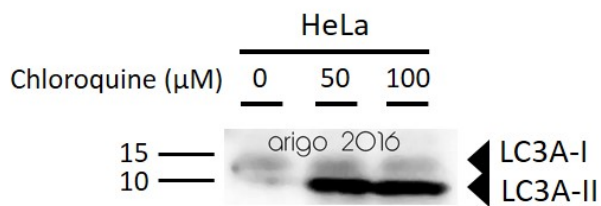
ARG51300 anti-LC3A antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with anti-LC3A antibody ARG51300.



ARG51300 anti-LC3A antibody WB image

Western blot: 30  $\mu$ g of HeLa cell lysate stained with ARG51300 anti-LC3A antibody at 1:500 dilution.



ARG51300 anti-LC3A antibody WB image

Western blot: 30  $\mu$ g of HeLa cells untreated or treated with Chloroquine at 50  $\mu$ M or 100  $\mu$ M (18 hr). The blots stained with ARG51300 anti-LC3A antibody at 1:500 dilution.