



## Rabbit Anti-LC3A/B antibody

SL20414R

<b>Product Name:</b>	LC3A/B
<b>Chinese Name:</b>	自噬微管相关蛋白轻链3A/3B抗体
<b>Alias:</b>	Autophagy related protein LC3 A; Autophagy related protein LC3 B; Autophagy related ubiquitin like modifier LC3 A; Autophagy related ubiquitin like modifier LC3 B; LC3; MAP1 light chain 3 like protein 1; MAP1 light chain 3 like protein 2; MAP1A/1B light chain 3 A; MAP1A/1B light chain 3 B; MAP1A/1BLC3; MAP1A/MAP1B LC3 A; MAP1A/MAP1B LC3 B; MAP1ALC3; MAP1BLC3; MAP1LC3A; MAP1LC3B; Microtubule associated protein 1 light chain 3 alpha; Microtubule associated protein 1 light chain 3 beta; Microtubule associated proteins 1A/1B light chain 3; Microtubule associated proteins 1A/1B light chain 3A; Microtubule associated proteins 1A/1B light chain 3B; MLP3A HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Cow,Horse,Sheep,Guinea Pig,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	14kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human LC3A/B:1-50/121
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**PubMed:**[PubMed](#)**Product Detail:**

A major contributor to cellular homeostasis is the ability of the cell to strike a balance between the formation and degradation/removal of its cellular components. This process of internal cellular turn-over is called autophagy (self-eating), and is facilitated by a pathway of around 16 interacting proteins in the human. LC3, a ubiquitin-like modifier protein, is the human homolog of yeast Apg8 and is involved in the formation of autophagosomal vacuoles, called autophagosomes. LC3 is expressed as 3 splice variants (LC3A, LC3B and LC3C), which exhibit different tissue distributions and are processed into cytosolic and autophagosomal membrane-bound forms, termed LC3-I and LC3-II, respectively. A disruption to the autophagic process is now associated with the progression of several cancers, neurodegenerative disorders and cardiac pathologies, where LC3 is widely employed as a marker for autophagy.

**Function:**

Probably involved in formation of autophagosomal vacuoles (autophagosomes).

**Subunit:**

3 different light chains, LC1, LC2 and LC3, can associate with MAP1A and MAP1B proteins (By similarity). Interacts with SQSTM1 (By similarity). Interacts with TP53INP1 and TP53INP2.

**Subcellular Location:**

Cytoplasmic. Endomembrane system; Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Note: LC3B binds to the autophagic membranes.

**Tissue Specificity:**

Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.

**Post-translational modifications:**

The precursor molecule is cleaved by APG4B/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.

**Similarity:**

Belongs to the MAP1 LC3 family.

**SWISS:**

Q9GZQ8

**Gene ID:**

81631

**Database links:**

[Entrez Gene: 81631](#)Human

[Entrez Gene: 84557](#)Human

[Entrez Gene: 66734](#)Mouse

[Entrez Gene: 67443](#)Mouse

[Entrez Gene: 362245](#)Rat

[Entrez Gene: 64862](#)Rat

[Omim: 601242](#)Human

[Omim: 609604](#)Human

[SwissProt: Q9GZQ8](#)Human

[SwissProt: Q9H492](#)Human

[SwissProt: Q91VR7](#)Mouse

[SwissProt: Q9CQV6](#)Mouse

[SwissProt: Q62625](#)Rat

[SwissProt: Q6XVN8](#)Rat

[Unigene: 356061](#)Human

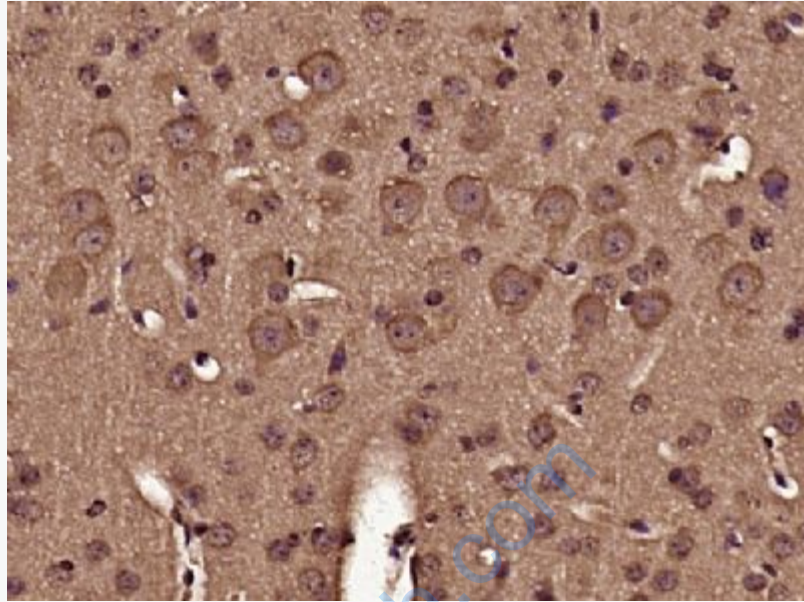
[Unigene: 196239](#)Mouse

[Unigene: 28357](#)Mouse

[Unigene: 41412](#)Rat

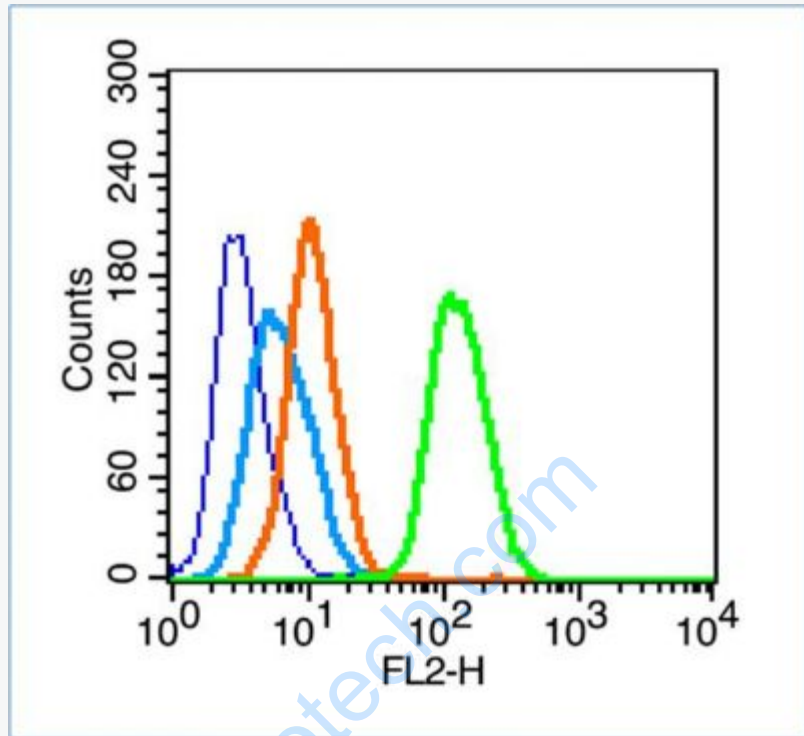
**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LC3A/B) Polyclonal Antibody, Unconjugated (SL20414R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): HeLa (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min at -20°C).

Primary Antibody (green line): Rabbit Anti-LC3A/B antibody (SL20414R),  
Dilution: 0.2µg /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.