



Rabbit Anti-phospho-MAP1LC3A (Ser12) antibody

SL5507R

Product Name:	phospho-MAP1LC3A (Ser12)
Chinese Name:	磷酸化自噬微管相关蛋白轻链3抗体
Alias:	MAP1LC3A(phospho Ser12); MAP1LC3A(phospho S12); ATG8E; Autophagy-related protein LC3 A; Autophagy-related ubiquitin-like modifier LC3 A; LC3; LC3A; MAP1 light chain 3 like protein 1; MAP1 light chain 3-like protein 1; MAP1A/1B light chain 3 A; MAP1A/MAP1B LC3 A; MAP1A/MAP1B light chain 3 A; MAP1ALC3; MAP1BLC3; Map1lc3a; Microtubule associated proteins 1A/1B light chain 3; Microtubule-associated protein 1 light chain 3 alpha; Microtubule-associated proteins 1A/1B light chain 3A; MLP3A HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	cytoplasmicThe cell membrane Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MAP1LC3A around the phosphorylation site of Ser12:RR(p-S)FA
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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](#)

MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. The protein encoded by this gene is one of the light chain subunits and can associate with either MAP1A or MAP1B. Two transcript variants encoding different isoforms have been found for this gene. The expression of variant 1 is suppressed in many tumor cell lines, suggesting that may be involved in carcinogenesis.

Function:

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. Directly interacts with SQSTM1; this interaction leads to MAP1LC3A recruitment to inclusion bodies containing polyubiquitinated protein aggregates and to inclusion body degradation by autophagy.

Subcellular Location:

Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Cytoplasmic vesicle, autophagosome. Note=LC3-II binds to the autophagic membranes.

Product Detail:**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:

Q9H492

Gene ID:

84557

Database links:

[Entrez Gene: 84557](#)Human

[Entrez Gene: 66734](#)Mouse

[Entrez Gene: 362245](#)Rat

[Oimim: 601242](#)Human

[SwissProt: Q9H492](#)Human

[SwissProt: Q91VR7](#)Mouse

[SwissProt: Q6XVN8](#)Rat

[Unigene: 632273](#)Human

[Unigene: 196239](#)Mouse

[Unigene: 3135](#)Rat

Important Note:

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

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