

Product datasheet for **AP32168PU-N**

LC3B (MAP1LC3B) Cleaved Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF
Recommended Dilution:	ELISA: 1/1,000. Immunofluorescence: 1/10-1/50. Immunocytochemistry: 1/50-1/100.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 96~125 amino acids from the C-terminal region of Human cleaved-LC3 (APG8b)
Specificity:	This antibody recognizes Cleaved Human and Mouse LC3B. Other species not tested.
Formulation:	PBS containing 0.09% (W/V) Sodium Azide as preservative State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate precipitation followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	microtubule associated protein 1 light chain 3 beta
Database Link:	Entrez Gene 81631 Human Q9GZQ8



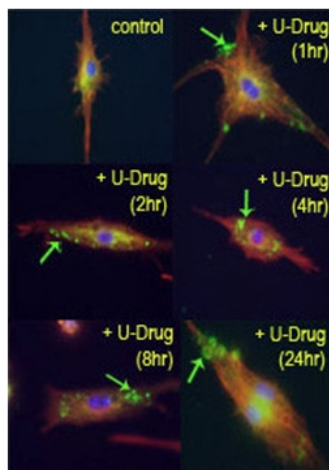
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Background:

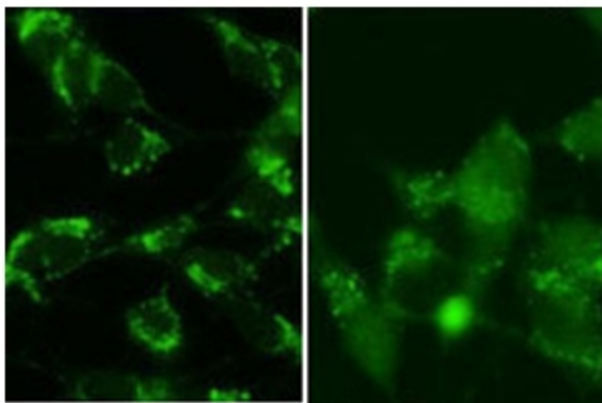
Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. These proteins are involved in formation of autophagosomal vacuoles (autophagosomes). MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. MAP1LC3b is one of the light chain subunits and can associate with either MAP1A or MAP1B. 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.

Synonyms:

MAP1LC3B, MAP1A/MAP1B, Map1lc3b, Map1alc3, Map1lc3

Product images:

Time course study of mouse leukaemic monocyte macrophage cells treated with U18666A, a drug that causes cholesterol and lipid storage in cells, thereby blocking fusion between late endosomes and lysosomes. Cleaved-LC3B Antibody (nctuate staining indicative of autophagic vacuole or phagosome structures. Data courtesy of Dr. Barry Boland, Department of Pharmacology, Oxford University.



SY5Y cells were pretreated with 5nM bafilomycin for 24hr and fixed in methanol (left panel) or 4% of paraformaldehyde (right panel). Treatment with Cleaved-LC3B Antibody (APG8b) at dilution 1/100. Data courtesy of Jianhui Zhu, MD, PhD & Charleen T. Chu, MD, PhD, University of Pittsburgh School of Medicine.