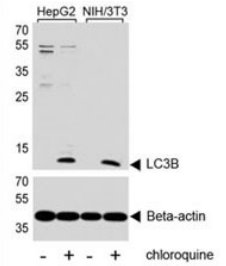
LC3B Antibody (F46113)

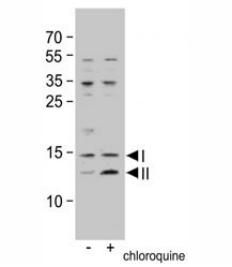
Catalog No.	Formulation	Size
F46113-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F46113-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

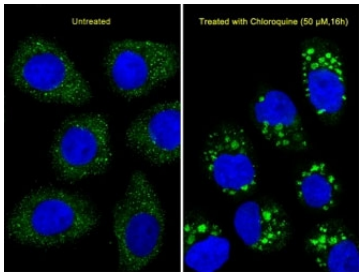
Availability	1-3 business days
Species Reactivity	Human, Rat
Predicted Reactivity	Bovine
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9GZQ8
Applications	Western blot: 1:1000 Immunofluorescence: 1:25
Limitations	This LC3B antibody is available for research use only.



Western blot analysis of lysate from human HepG2 and mouse NIH3T3 cell line, untreated or treated with chloroquine (50uM) using LC3B antibody at 1:1000.



Western blot analysis of LC3B antibody in untreated or treated HeLa cell lysate; Both non-lipidated (arrow, I) and lipidated LC3B (arrow, II) were detected.



Immunofluorescent analysis of U251 cells using LC3B antibody. U251 cells(right) were treated with Chloroquine (50 uM,16h). Ab was diluted at 1:25 dilution. Alexa Fluor 488-conjugated goat anti-rabbit lgG was used as the secondary Ab (green). DAPI was used as a nuclear counterstain (blue).

Description

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.

Application Notes

Titration of the LC3B antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for this LC3B antibody.

Storage

Aliquot the LC3B antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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