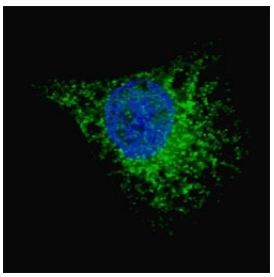
LC3A Antibody (F46094)

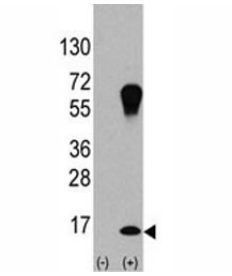
Catalog No.	Formulation	Size
F46094-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F46094-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9H492
Applications	Immunofluorescence: 1:200 Western blot: 1:1000
Limitations	This LC3A antibody is available for research use only.



Fluorescent image of Chloroquine treated U251 cells (50 uM, 16h) stained with LC3A antibody. LC3A immunoreactivity is localized to autophagic vacuoles.



Western blot analysis of LC3A antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the LC3A/APG8a gene (2).

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. MAP1LC3a 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 LC3A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This LC3A antibody was produced from rabbits immunized with full-length recombinant human LC3A/MAP1LC3A.

Storage

Aliquot the LC3A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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