Datasheet for ABIN3031792

anti-LC3C antibody (pSer12)

4 Images

Go to Product page

Overview

Quantity:	0.4 mL
Target:	LC3C (MAP1LC3C)
Binding Specificity:	pSer12
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LC3C antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Dot Blot (DB)

Product Details

Immunogen:	This phospho-LC3C antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS12 of human LC3C.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Bovine, Mouse, Rat
Purification:	Antigen affinity purified

Target Details

Target:	LC3C (MAP1LC3C)
Alternative Name:	LC3C (MAP1LC3C Products)

Target Details

Background:	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. 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).
UniProt:	Q9H492
Pathways:	Autophagy

Application Details

Application Notes:	Titration of the phospho-LC3C antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000,Dot blot: 1:500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	In 1X PBS pH 7.4 with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the phospho-LC3C antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

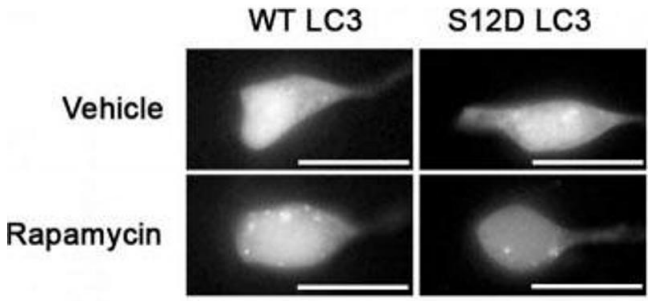
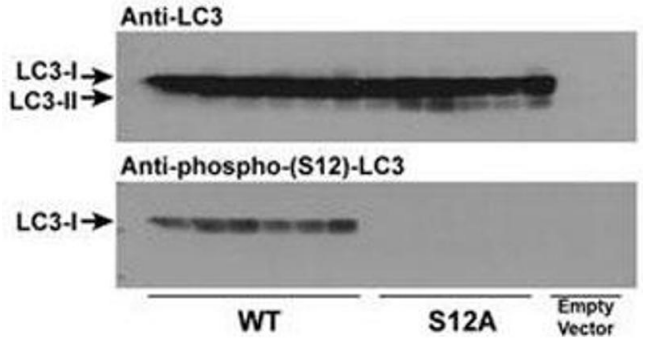
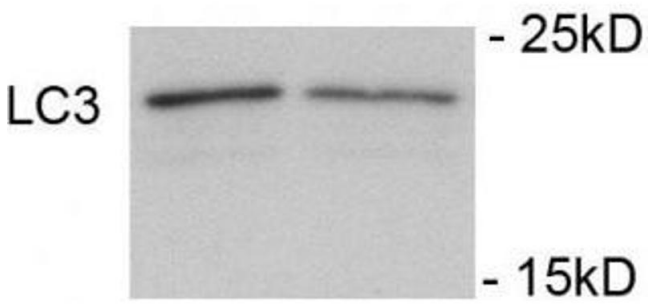


Image 1. SH-SY5Y cells expressing GFP-LC3-WT or-S12D mutation (reduced puncta) treated with rapamycin or vehicle for 1h and probed with phospho-LC3C antibody



Western Blotting

Image 2. Wild type LC3 and LC3 S12A mutant vectors were transfected into CHO cells and tested with phospho-LC3C antibody (S12A = replacement of the amino acid position 12 serine of LC3 with alanine). Expected size: LC3-I = 16kDa, and LC3-II = 14 kDa



Western Blotting

Image 3. Immunoblots of SH-SY5Y cells treated with rapamycin for 1 h was probed with phospho-LC3C antibody. The data shows that treatment with rapamycin showed no significant change in level of LC3.

Please check the product details page for more images. Overall 4 images are available for ABIN3031792.