



Datasheet for ABIN1449594
anti-MAP1LC3A antibody (N-Term)



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5 Images

Overview

Quantity:	0.4 mL
Target:	MAP1LC3A
Binding Specificity:	AA 1-30, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAP1LC3A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	KLH conjugated synthetic peptide between 1~30 amino acids from the N-term of Human LC3
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Species reactivity (tested):Human, Mouse, Rat.
Purification:	Saturated Ammonium Sulfate precipitation followed by dialysis against PBS

Target Details

Target:	MAP1LC3A
Alternative Name:	LC3 (MAP1LC3A Products)
Background:	Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic

Target Details

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. Synonyms: Autophagy-related protein LC3 A, Autophagy-related ubiquitin-like modifier LC3 A, LC3A, MAP1 light chain 3-like protein 1, MAP1A / 1B light chain 3 A, MAP1A/1B light chain 3 A, MAP1A/MAP1B LC3 A, MAP1LC3A, Microtubule-associated protein 1 light chain 3 alpha, Microtubule-associated proteins 1A/1B light chain 3A

Molecular Weight: 14272 Da

Gene ID: 84557

NCBI Accession: [NM_032514](#)

Pathways: [Autophagy](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.25 mg/mL

Buffer: PBS containing 0.09 % (W/V) Sodium Azide as preservative

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

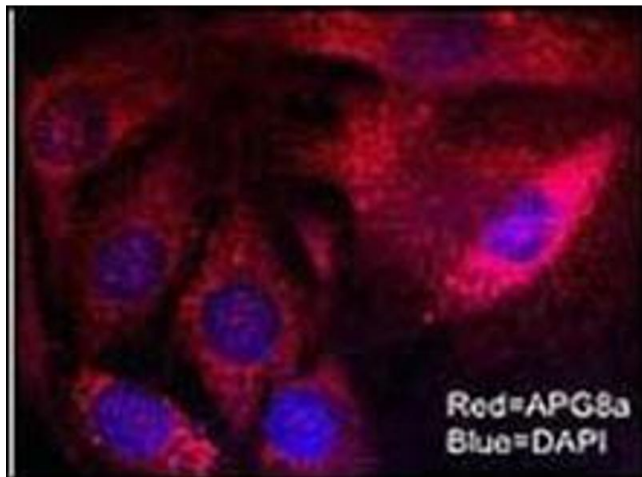
should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

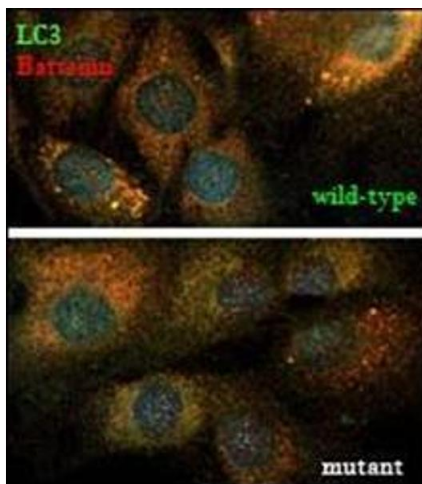
Storage Comment: Store undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer.

Images



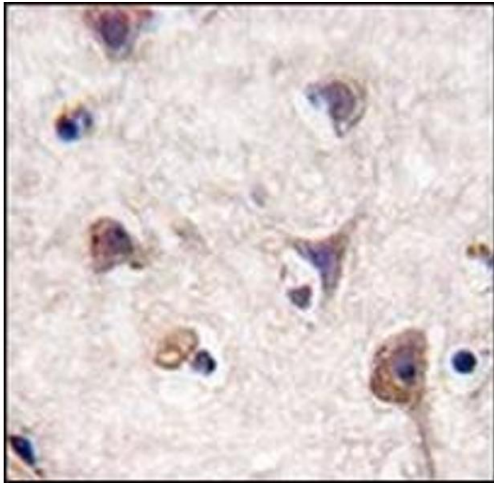
Immunofluorescence

Image 1. Immunofluorescent staining of Mouse brain cells using LC3



Immunofluorescence

Image 2. LC3 and the CLN3-encoded protein, battenin, co-immunostaining. Wild-type and mutant cerebellar cells were costained with anti-LC3 Antibody (Red) and a monoclonal anti-Battenin Antibody(Green) and images were captured by Confocal Microscopy. Note the numerous larger vesicular structures, typical of mature AVs, stained with both the LC3 and battenin antibodies in wild-type cells (arrows), which are rare in mutant cells. Blue=DAPI. *Protocol and data courtesy of Dr. Susan Cotman, Center for Human Genetic Research, Massachusetts General Hospital.*



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin-embedded human brain tissue reacted with Autophagy LC3 Antibody followed which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN1449594.