10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAP1LC3A antibody(N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22378a

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q9H492
Other Accession	Q2HJ23, Q91VR7, Q6XVN8, Q6NX90
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Rat, Canine, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB59955
Calculated MW	14272

Additional Information

Gene ID	84557
Other Names	Microtubule-associated proteins 1A/1B light chain 3A, Autophagy-related protein LC3 A, Autophagy-related ubiquitin-like modifier LC3 A, MAP1 light chain 3-like protein 1, MAP1A/MAP1B light chain 3 A, MAP1A/MAP1B LC3 A, Microtubule-associated protein 1 light chain 3 alpha, MAP1LC3A
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1-40 amino acids from human.
Dilution	IHC-P-Leica~~1:500 WB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MAP1LC3A antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAP1LC3A
Function	Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:20713600, PubMed:24290141). While LC3s are

	involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:20713600). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:31006537, PubMed:31006538).
Cellular Location	Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Endomembrane system; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91VR7}. Note=LC3-II binds to the autophagic membranes.
Tissue Location	Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes

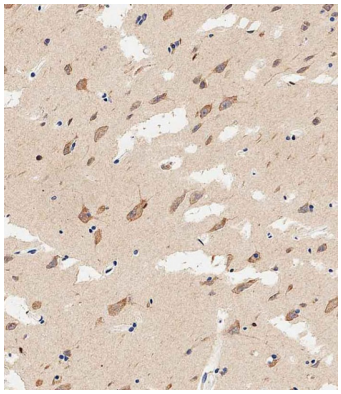
Background

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes). Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.

References

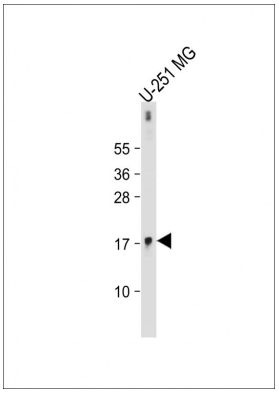
He H.,et al.J. Biol. Chem. 278:29278-29287(2003).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

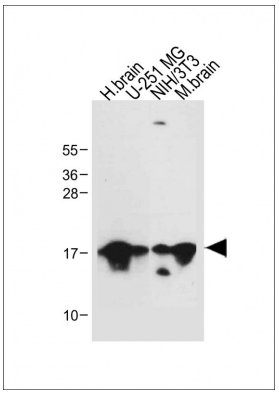
Images



Immunohistochemical analysis of paraffin-embedded human brain tissue using AP22378a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Anti-MAP1LC3A antibody(N-term) at 1:2000 dilution + U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





All lanes : Anti-MAP1LC3A antibody(N-term) at 1:500 dilution Lane 1: Human brain tissue lysate Lane 2: U-251 MG whole cell lysate Lane 3: NIH/3T3 whole cell lysate Lane 4: Mouse brain tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.