


Product datasheet

Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker ab52768

Recombinant RabMAb

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Overview

Product name	Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker
Description	Rabbit monoclonal [EP1983Y] to MAP1LC3A - Autophagosome Marker
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide within Human MAP1LC3A aa 100 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: Q9H492
Positive control	WB: Hela cell lysate IHC-P: Human breast carcinoma tissue
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP1983Y
Isotype	IgG

Applications

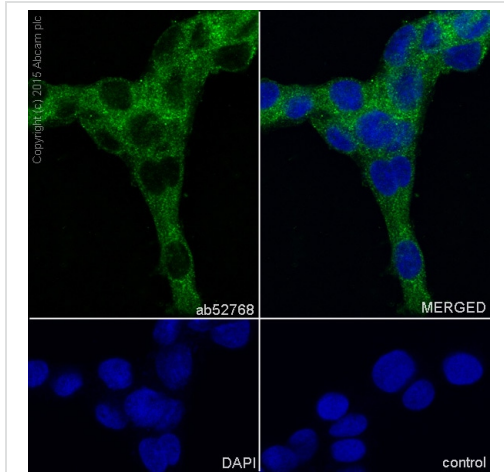
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab52768 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/40 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/5000 - 1/10000. Detects a band of approximately 16 kDa (predicted molecular weight: 14 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/500.

Target

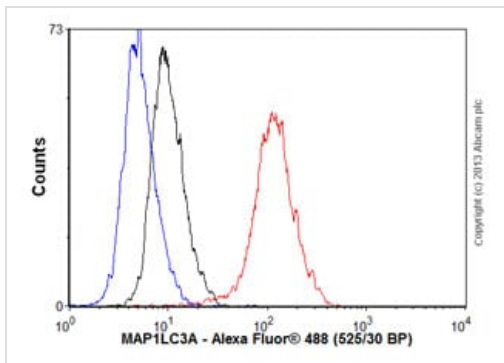
Function	Probably involved in formation of autophagosomal vacuoles (autophagosomes).
Tissue specificity	Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.
Sequence similarities	Belongs to the MAP1 LC3 family.
Post-translational modifications	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.
Cellular localization	Cytoplasm > cytoskeleton. Endomembrane system. Cytoplasmic vesicle > autophagosome membrane. LC3-II binds to the autophagic membranes.

Images



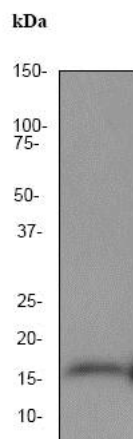
Immunocytochemistry/ Immunofluorescence - Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker (ab52768)

Immunocytochemistry/Immunofluorescence analysis of C6 (rat glioma) labelling MAP1LC3A with purified ab52768 at 1/500. Cells were fixed with 100% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).



Flow Cytometry (Intracellular) - Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker (ab52768)

Overlay histogram showing SHSY-5Y cells stained with ab52768 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab52768, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in SHSY-5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-MAP1LC3A antibody [EP1983Y]
- Autophagosome Marker (ab52768)

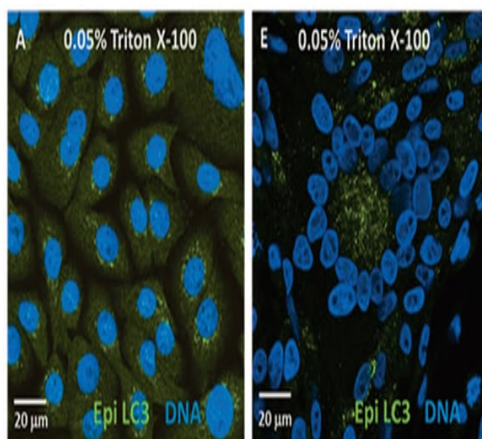
Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker
(ab52768) at 1/10000 dilution + HeLa cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP labeled at 1/2000 dilution

Predicted band size: 14 kDa

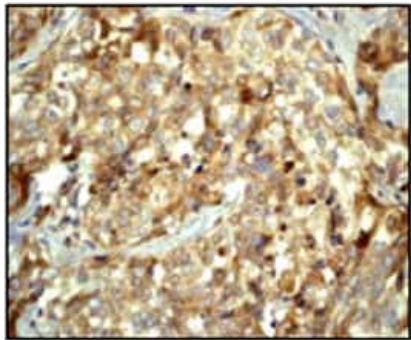
Observed band size: 16 kDa



Immunocytochemistry/Immunofluorescence analysis of human
keratinocytes (panel A) and VZV-infected melanoma cells (panel
E) labelling MAP1LC3A with ab52768.

Immunocytochemistry/ Immunofluorescence - Anti-
MAP1LC3A antibody [EP1983Y] - Autophagosome
Marker (ab52768)

Image from Buckingham E Met al., Biotechniques.
2014;57(5):241-4. Fig 1.; doi: 10.2144/000114226.



Immunohistochemical staining of MAP1LC3A in paraffin embedded human breast carcinoma using ab52768 at a 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP1LC3A antibody [EP1983Y] - Autophagosome Marker (ab52768)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MAP1LC3A antibody [EP1983Y] -
Autophagosome Marker (ab52768)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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