

Product datasheet

Anti-LC3B antibody [EPR21235] ab239416

KO **VALIDATED** Recombinant

2 Images

Overview

Product name	Anti-LC3B antibody [EPR21235]
Description	Rabbit monoclonal [EPR21235] to LC3B
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein. Database link: Q9GZQ8
Positive control	ICC/IF: HAP1 cells (+/- chloroquine) (HAP1-MAP1LC3B knockout cells used as negative cell line). IHC-P: FFPE human normal colon and human normal cerebral cortex tissue sections.
General notes	This product was made using synthetic libraries and phage display technology . This antibody is a recombinant chimeric antibody. Rabbit chimeric monoclonal antibody (Human Fab/ Rabbit Fc).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Sodium azide Constituents: 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21235
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab239416** in the following tested applications.

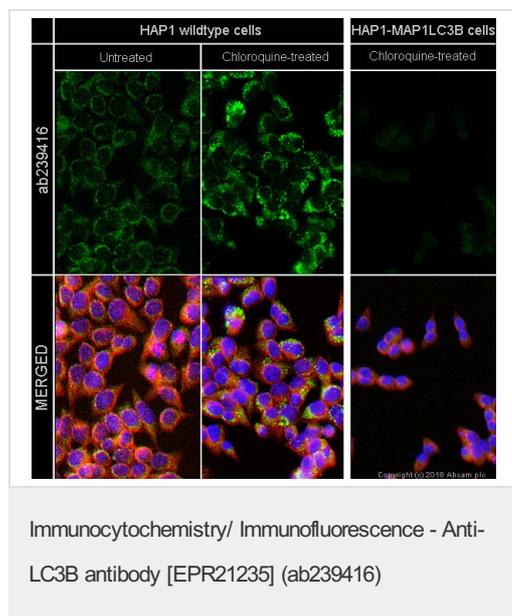
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 0.1 µg/ml.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

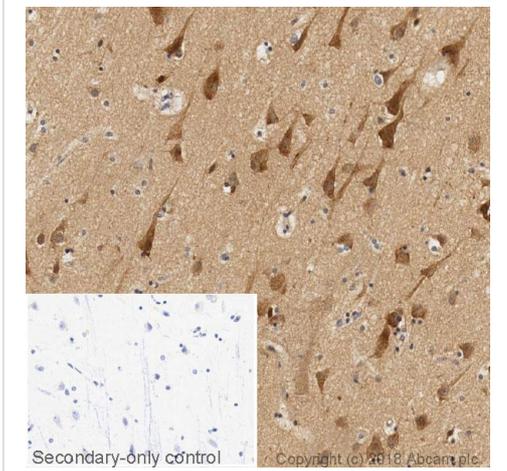
Target

Function	Probably involved in formation of autophagosomal vacuoles (autophagosomes).
Tissue specificity	Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver.
Sequence similarities	Belongs to the MAP1 LC3 family.
Post-translational modifications	The precursor molecule is cleaved by APG4B/ATG4B to form LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form LC3-II.
Cellular localization	Cytoplasm > cytoskeleton. Endomembrane system. Cytoplasmic vesicle > autophagosome membrane. LC3-II binds to the autophagic membranes.

Images



ab239416 staining LC3B in HAP1 cells (wildtype and MAP1LC3B knockout) +/- Chloroquine (50µM, 24 hours). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab239416 at 0.1µg/ml and ab195889 then detected with an Alexa Fluor® 488 goat anti-rabbit secondary antibody (ab150081) at a 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue), and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LC3B antibody [EPR21235] (ab239416)

IHC image of LC3B staining in a section of formalin-fixed paraffin-embedded normal human cerebral cortex performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab239416, 5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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