

## Product datasheet

# Anti-LC3B antibody ab48394

★★★★☆ 29 Abreviews 140 References 6 Images

### Overview

<b>Product name</b>	Anti-LC3B antibody
<b>Description</b>	Rabbit polyclonal to LC3B
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IP, IHC-P, WB, IHC-Fr
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Dog, Human, Zebrafish, Syrian hamster, Bacteria <b>Predicted to work with:</b> Cow
<b>Immunogen</b>	Synthetic peptide corresponding to Human LC3B (N terminal). A synthetic peptide made to an N-terminal portion of the human LC3 protein sequence (between residues 1-100). Database link: <a href="#">Q9GZQ8</a>
<b>Positive control</b>	Human brain lysate, mouse brain lysate, ES, HeLa, HEK293 and MCF7 cells, human lymphocytes and embryoid bodi.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab48394** in the following tested applications.

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

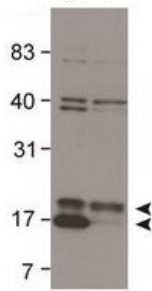
Application	Abreviews	Notes
ICC/IF	★★★★★	Use a concentration of 1 µg/ml.

Application	Abreviews	Notes
IP	★★★★☆	Use at an assay dependent concentration. 20 ug per 500 ug of protein.
IHC-P	★★★★☆	1/200 - 1/400.
WB	★★★★★	Use a concentration of 0.5 - 2 µg/ml. Detects a band of approximately 17 kDa (predicted molecular weight: 15 kDa). Detects bands of approximately 17 kDa (LC3-II) and 19 kDa (LC3-I) (predicted molecular weight: 15 kDa).
IHC-Fr	★★★★☆	Use at an assay dependent concentration.

## Target

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

## Images



Western blot - Anti-LC3B antibody (ab48394)

**All lanes** : Anti-LC3B antibody (ab48394) at 2 µg/ml

**Lane 1** : ATG5+ control lysate (see reference)

**Lane 2** : ATG5- control lysate (see reference)

Lysates/proteins at 40 µg per lane.

### Secondary

**All lanes** : Goat anti-rabbit HRP conjugated

Developed using the ECL technique.

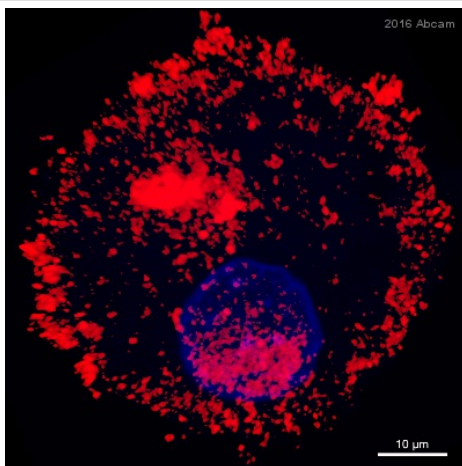
**Predicted band size:** 15 kDa

**Observed band size:** 17,19 kDa

**Additional bands at:** 38 kDa, 40 kDa, 80 kDa. We are unsure as to the identity of these extra bands.

Observed band at 18 kDa: LC3-I.

Observed band at 17 kDa: LC3-II.



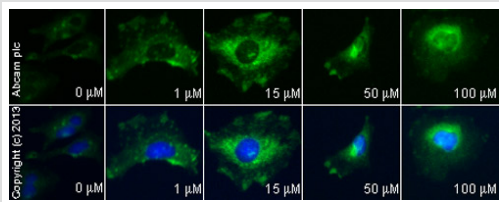
Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab48394)

This image is courtesy of an Abreview by Armen Petrosyan.

ab48394 staining LC3B in a Rat hepatocyte by ICC/IF

(Immunocytochemistry/immunofluorescence).

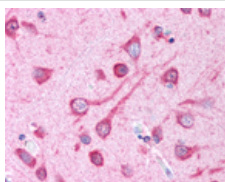
Cells were fixed with formaldehyde, permeabilized with 0.2% Triton X-100 in PBS and blocked with 1% Donkey serum in 0.1% PBST for 60 minutes at 21°C. Samples were incubated with primary antibody (1/50 in PBS + 1% BSA) for 3 hours at 22°C. An Alexa Fluor® 394-conjugated Donkey anti-rabbit IgG polyclonal was used as the secondary antibody at a dilution of 1/200.



Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab48394)

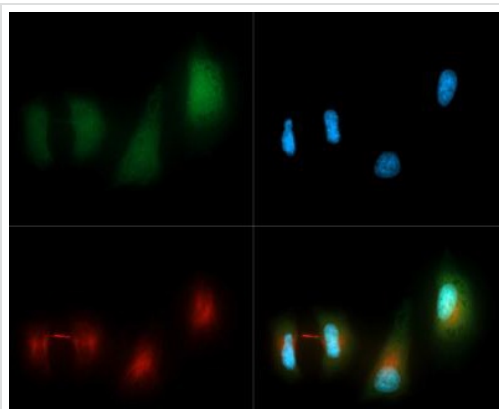
ab48394 staining LC3B (LC3-II) in HeLa cells treated with calmidazolium chloride (ab120658), by ICC/IF. Increase of LC3B (LC3-II) expression correlates with increased concentration of calmidazolium chloride, as described in literature.

The cells were incubated at 37°C for 6h in media containing different concentrations of ab120658 (calmidazolium chloride) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab48394 (1 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.



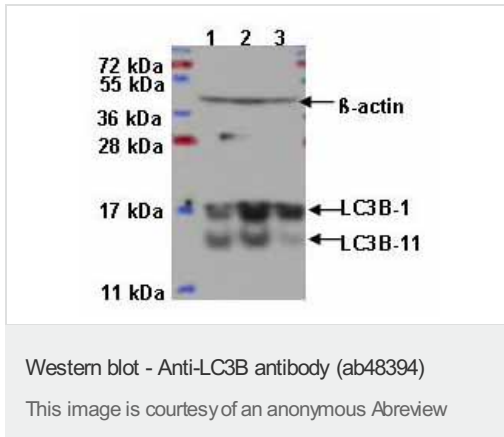
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LC3B antibody (ab48394)

Immunohistochemistry analysis of (formalin-fixed,paraffin-embedded sections) analysis of human brain,cerebral cortex,neurons with cell processes LC3B with ab48394



Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab48394)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells with Dylight 488 (green).Nuclei and alpha -tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



**All lanes :** Anti-LC3B antibody (ab48394) at 1/2000 dilution

**Lane 1 :** Rat whole tissue lysate - Normal liver

**Lane 2 :** Rat whole tissue lysate - liver treated with AEE788 at 50 mg/kg 3 times a week for 1 week

**Lane 3 :** Rat whole tissue lysate - liver treated with RAD at 2.5 mg/kg daily for 1 week

Lysates/proteins at 30 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab6721) at 1/5000 dilution

Developed using the ECL technique.

Performed under non-reducing conditions.

**Predicted band size:** 15 kDa

**Observed band size:** 17 kDa

**Exposure time:** 1 minute

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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