# abcam

# Product datasheet

# Anti-LC3B antibody ab51520

★★★★★ 18 Abreviews 399 References 9 图像

#### 概述

产品名称 Anti-LC3B抗体

描述 兔多克隆抗体to LC3B

**宿主** Rabbit

特异性 ab51520 is specific for the B isoform of LC3.

经测试应用 适用于: IHC-Fr, Flow Cyt (Intra), WB, ICC/IF

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human LC3B (N terminal). Synthetic peptide made to the N

terminal region of human LC3, isoform B protein.

Database link: Q9GZQ8

**阳性**对照 ICC/IF: HeLa, U373-MGc cells. IHC-P: U87-MG cells. Flow Cyt (Intra): NTERA-2 cells. IHC-P-Fr:

U373-MG cells.

常规说明 ab51520 has been shown to work on human malignant brain tumors, breast cancer, leukemia

samples, and murine cells.

The product formulation changed to include 1% BSA on 17th May 2017. The following lot does not

contain BSA and is still in stock GR320876. All future lots will contain 1% BSA.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA

纯**度** Immunogen affinity purified

1

Primary antibody说明 ab51520 has been shown to work on human malignant brain tumors, breast cancer, leukemia

samples, and murine cells.

**克隆** 多克隆

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab51520于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr	<b>★★★★★ (2)</b>	1/2000.
Flow Cyt (Intra)		1/200.
WB	★★★★☆ (9)	1/3000. Predicted molecular weight: 15 kDa. Detects bands of ~16 kDa (LC3-II) and ~18 kDa (LC3-I).
ICC/IF	<b>★★★★★ (3)</b>	1/2000.

## 靶标

功能 Probably involved in formation of autophagosomal vacuoles (autophagosomes).

组织**特异性** Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver.

序列相似性 Belongs to the MAP1 LC3 family.

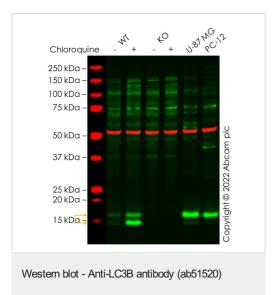
翻译后修饰 The precursor molecule is cleaved by APG4B/ATG4B to form LC3-I. This is activated by

APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form LC3-II.

细胞定位 Cytoplasm > cytoskeleton. Endomembrane system. Cytoplasmic vesicle > autophagosome

membrane. LC3-II binds to the autophagic membranes.

## 图片



All lanes: Anti-LC3B antibody (ab51520) at 1/3000 dilution

Lane 1: Wild-type HepG2 untreated control cell lysate

Lane 2: Wild-type HepG2 Treated Chloroquine (50 uM, 16 h) cell

lysate

Lane 3: MAP1LC3B knockout HepG2 untreated control cell lysate

Lane 4: MAP1LC3B knockout HepG2 Treated Chloroquine (50

uM, 16 h) cell lysate

Lane 5: U-87 MG cell lysate

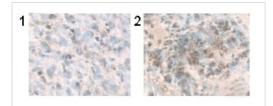
Lane 6: PC-12 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 15 kDa **Observed band size:** 14,16 kDa

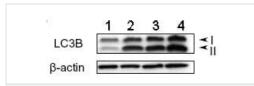
False colour image of Western blot: Anti-LC3B antibody staining at 1/3000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab51520 was shown to bind specifically to LC3B. A band was observed at 16/14 kDa (yellow arrows) in treated wildtype HepG2 cell lysates with no signal observed at this size in MAP1LC3B knockout cell line ab277828 (knockout cell lysate ab283796). To generate this image, wild-type and MAP1LC3B knockout HepG2 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunohistochemistry (Frozen sections) - Anti-LC3B antibody (ab51520)

Ab51520 at 1/2000 dilution staining treated U87-MG cultured and subcutaneous tumors

- 1) Control
- 2) Temozolomide



Western blot - Anti-LC3B antibody (ab51520)

All lanes: Anti-LC3B antibody (ab51520) at 1/3000 dilution

Lane 1 : treated U87-MG (human glioblastoma astrocytoma)

lysates with Arsenic Trioxide at 0  $\mu M$ 

Lane 2: treated U87-MG (human glioblastoma astrocytoma)

lysates with Arsenic Trioxide at 2 µM

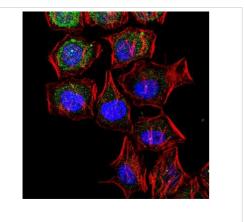
Lane 3: treated U87-MG (human glioblastoma astrocytoma)

lysates with Arsenic Trioxide at 4 µM

Lane 4: treated U87-MG (human glioblastoma astrocytoma)

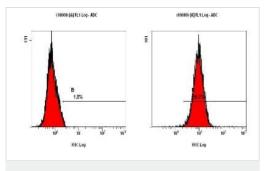
lysates with Arsenic Trioxide at 8  $\mu M$ 

Predicted band size: 15 kDa



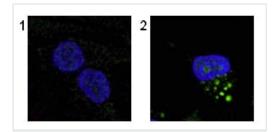
Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab51520)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling LC3B with ab51520.An Alexa Fluor 488-conjugated Goat to rabbit lgG was used as secondary antibody (green). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red). DAPI was used to stain the cell nuclei (blue).



Flow Cytometry (Intracellular) - Anti-LC3B antibody (ab51520)

Flow cytometry (Intracellular) analysis of NTERA-2 cells with ab51520 at 1/200 using Dylight-488 conjugated goat anti-rabbit lgG secondary.



Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab51520)

Ab51520 at 1/2000 dilution staining treated U373-MG cells;

- 1) Control
- 2) C2-ceramide.

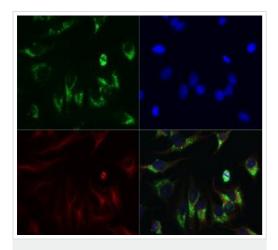
The nuclei were stained with DAPI.



Immunohistochemistry (Frozen sections) - Anti-LC3B antibody (ab51520)

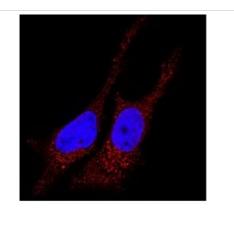
Ab51520 at 1/2000 dilution staining treated U373-MG (human glioblastoma) cells

- 1) Control
- 2) Temozolomide



Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab51520)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells using anti-LC3B antibody(red) at 0.1 ug/ml. Nuclei were counterstained with DAPI (blue). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



Immunocytochemistry/Immunofluorescence analysis of HeLa cells using anti-LC3B antibody(red). Nuclei were counterstained with DAPI (blue).

Immunocytochemistry/ Immunofluorescence - Anti-LC3B antibody (ab51520)

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