

# LC3B-Specific Polyclonal antibody, PBS Only

Catalog Number: 18725-1-PBS

## Basic Information

## Catalog Number:

18725-1-PBS

## Concentration:

1 mg/ml

## Source:

Rabbit

## Isotype:

IgG

## GenBank Accession Number:

NM\_022818

## GeneID (NCBI):

81631

## ENSEMBL Gene ID:

ENSG00000140941

## UNIPROT ID:

Q9GZQ8

## Full Name:

microtubule-associated protein 1  
light chain 3 beta

## Calculated MW:

15 kDa

## Observed MW:

15 kDa, 18 kDa

## Purification Method:

Antigen affinity purification

## Applications

## Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

## Species Specificity:

human, mouse, rat

## Background Information

LC3B, also named as MAP1LC3B, MAP1A/1BLC3, belongs to the MAP1 LC3 family. It is a subunit of neuronal microtubule-associated MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. In cell biology, autophagy, or autophagocytosis, is a catabolic process involving the degradation of a cell's own components through the lysosomal machinery. It is a major mechanism by which a starving cell reallocates nutrients from unnecessary processes to more-essential processes. Two forms of LC3, called LC3-I (17-19kd) and -II (14-16kd), were produced post-translationally in various cells. LC3-I is cytosolic, whereas LC3-II is membrane bound. 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. The amount of LC3-II is correlated with the extent of autophagosome formation. LC3-II is the first mammalian protein identified that specifically associates with autophagosome membranes. MAP1LC3 has 3 isoforms MAP1LC3A, MAP1LC3B and MAP1LC3C. MAP1LC3A and MAP1LC3C are produced by the proteolytic cleavage after the conserved C-terminal Gly residue, like their rat counterpart, MAP1LC3B does not undergo C-terminal cleavage and exists in a single modified form. This antibody is specific to LC3B.

## Storage

## Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

## Storage Buffer:

PBS only, pH7.3

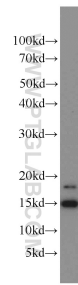
For technical support and original validation data for this product please contact:

T: 4006900926

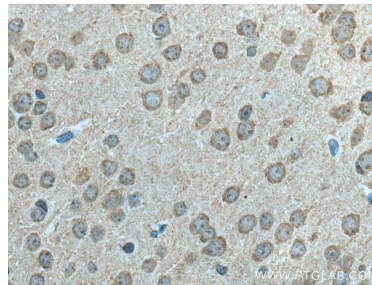
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

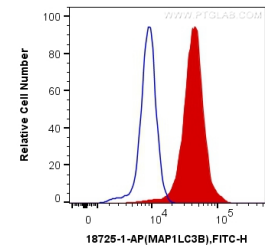
## Selected Validation Data



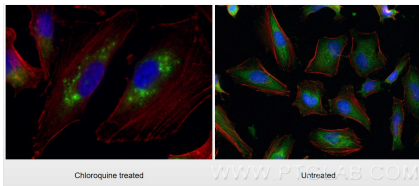
human brain tissue were subjected to SDS PAGE followed by western blot with 18725-1-AP (LC3B-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 18725-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 18725-1-AP (LC3B-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 18725-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human LC3B-Specific (18725-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 18725-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed Chloroquine treated HeLa cells using LC3B-Specific antibody (18725-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 18725-1-PBS in a different storage buffer formulation.