



LC3B Polyclonal Antibody

Catalog No	BYab-14278
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;IHC
Gene Name	MAP1LC3B
Protein Name	Microtubule-associated proteins 1A/1B light chain 3B
Immunogen	Recombinant Protein of MAP LC3 β
Specificity	The antibody detects endogenous MAP LC3 β protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1:1000-2000 IHC: 1:200-500 IF 1:200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	MAP1LC3B; MAP1ALC3; Microtubule-associated proteins 1A/1B light chain 3B; Autophagy-related protein LC3 B; Autophagy-related ubiquitin-like modifier LC3 B; MAP1 light chain 3-like protein 2; MAP1A/MAP1B light chain 3 B; MAP1A/MAP1B LC3 B; Microtubule-associated protein 1 light chain 3 beta
Observed Band	14,16kD
Cell Pathway	Cytoplasmic vesicle, autophagosome membrane ; Lipid-anchor . Endomembrane system ; Lipid-anchor . Mitochondrion membrane ; Lipid-anchor . Cytoplasm, cytoskeleton . Cytoplasmic vesicle . LC3-II binds to the autophagic membranes. LC3-II localizes with the mitochondrial inner membrane during Parkin-mediated mitophagy (PubMed:28017329). Localizes also to discrete punctae along the ciliary axoneme. .
Tissue Specificity	Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver.
Function	caution:PubMed:12740394 has shown that the protein is cleaved at Lys-122 but PubMed:15355958 has shown that the cleavage site is at Gly-120 as in other mammalian orthologs.,function:Probably involved in formation of autophagosomal

Nanjing BYabscience technology Co.,Ltd



vacuoles (autophagosomes).,PTM: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.,similarity:Belongs to the MAP1 LC3 family.,subcellular location:LC3-II binds to the autophagic membranes.,subunit:3 different light chains, LC1, LC2 and LC3, can associate with MAP1A and MAP1B proteins.,tissue specificity:Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver.,

Background

The product of this gene is a subunit of neuronal microtubule-associated MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. Studies on the rat homolog implicate a role for this gene in autophagy, a process that involves the bulk degradation of cytoplasmic component. [provided by RefSeq, Jul 2008],

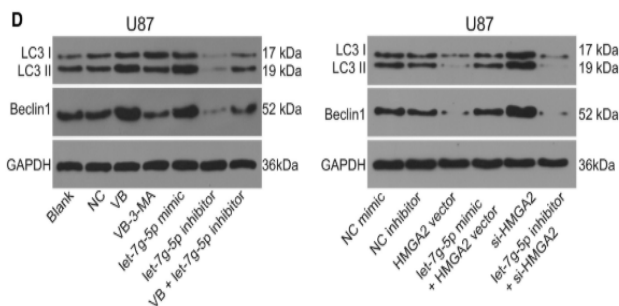
matters needing attention

Avoid repeated freezing and thawing!

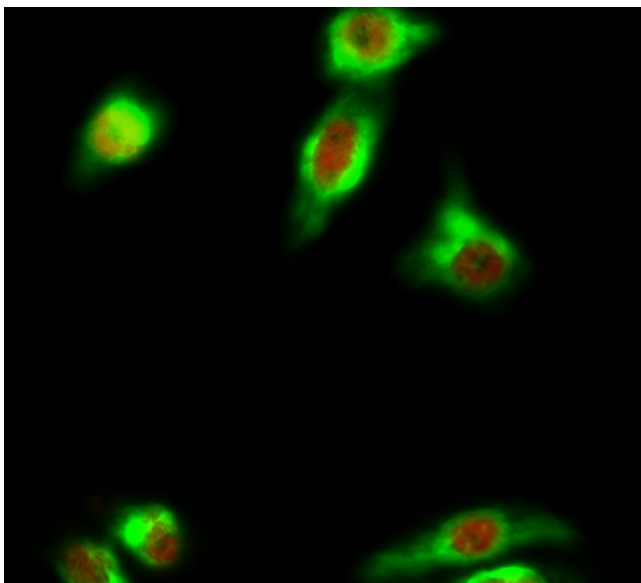
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

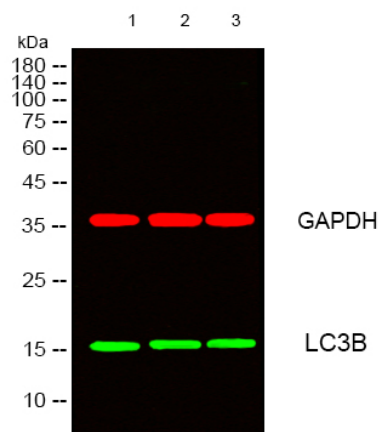
Products Images



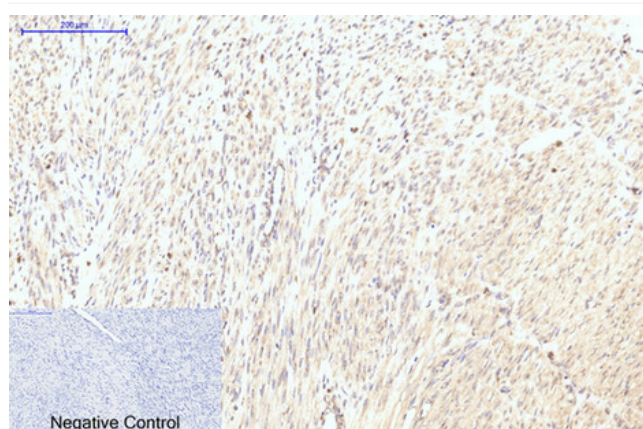
Jia, Wei-Qiang, et al. "Verbascoside inhibits progression of glioblastoma cells by promoting Let-7g-5p and down-regulating HMG22 via Wnt/beta-catenin signalling blockade." *Journal of cellular and molecular medicine* 24.5 (2020): 2901-2916.



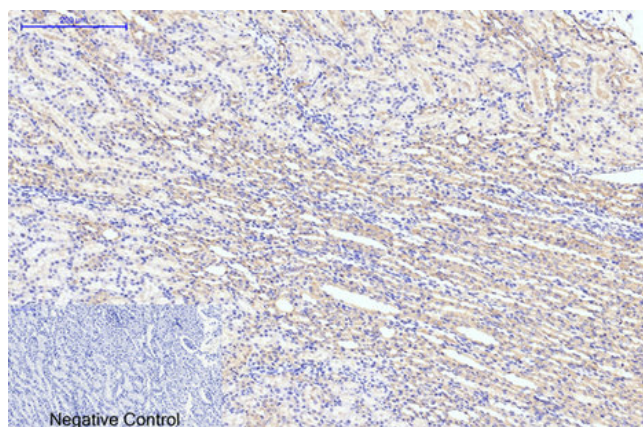
Immunofluorescence analysis of Hela cell.
1,Cleaved-PARP-1 (D214) Polyclonal Antibody(red) was diluted at 1:200(4° overnight). LC3B Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



Western blot analysis of lysates from 1) HeLa, 2) 3T3, 3) Rat Brain Tissue cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,LC3B Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,LC3B Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.