

# LC3B Recombinant Rabbit Monoclonal Antibody (2H30L32)

Product Details	
Size	100 µg
Species	Human, Mouse, Rat
Published Species	Artificial Control, Human
Expression System	Rabbit / IgG
Class	Recombinant Monoclonal
Type	Antibody
Clone	2H30L32
Conjugate	Unconjugated
Immunogen	Recombinant human LC3B protein corresponding to amino acids 2–120
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532340

Applications	Tested Dilution	Publications
ChIP assay (ChIP)	1 µL	-
Immunocytochemistry (ICC)	1-3 µg/mL	1 Publication
Immunofluorescence (IF)	1-3 µg/mL	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	-
Western Blot (WB)	1-5 µg/mL	2 Publications
Immunoprecipitation (IP)	-	1 Publication

## Product Specific Information

This antibody is predicted to react with mouse based on sequence homology.

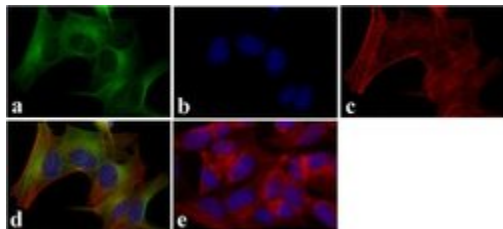
Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

## Product Images For LC3B Recombinant Rabbit Monoclonal Antibody (2H30L32)

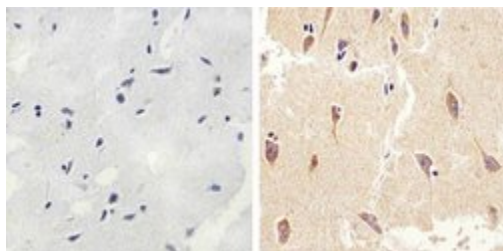
### LC3B Antibody (700712) in IF

Immunofluorescent analysis of LC3B was done on 70% confluent log phase SHSY5Y cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with LC3B Recombinant Rabbit Monoclonal Antibody (Product # 700712) at 2 µg/mL and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing cytoplasmic localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.



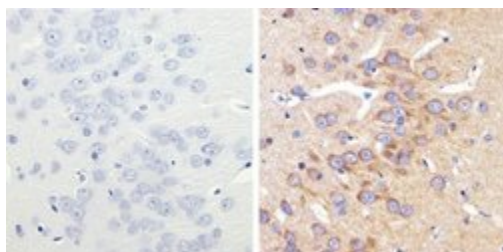
### LC3B Antibody (700712) in IHC (P)

Immunohistochemistry analysis of MAP1LC3B showing staining in the cytoplasm of paraffin-embedded human brain tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10 mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with MAP1LC3B (2H30L32) Monoclonal antibody (Product # 700712) diluted in 3% BSA-PBS at a dilution of 1:50 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using a HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



### LC3B Antibody (700712) in IHC (P)

Immunohistochemistry analysis of MAP1LC3B showing staining in the cytoplasm of paraffin-embedded rat brain tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10 mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with MAP1LC3B (2H30L32) Monoclonal antibody (Product # 700712) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using a HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



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## 6 References

### Immunocytochemistry (1)

International journal of molecular medicine

#### Codonopsis bulleyana Forest ex Diels inhibits autophagy and induces apoptosis of colon cancer cells by activating the NF- $\kappa$ B signaling pathway.

"700712 was used in Immunocytochemistry-immunofluorescence to investigate the anti-cancer activity of *odonopsis bulleyana* Forest ex Diels, and its potential molecular mechanisms."

Authors: Luan Y, Li Y, Zhu L, Zheng S, Mao D, Chen Z, Cao Y

**Species**  
Human  
Artificial Control

**Dilution**  
1:200  
Not Cited

**Year**  
2018

### Immunofluorescence (2)

International journal of molecular medicine

#### Codonopsis bulleyana Forest ex Diels inhibits autophagy and induces apoptosis of colon cancer cells by activating the NF- $\kappa$ B signaling pathway.

"700712 was used in Immunocytochemistry-immunofluorescence to investigate the anti-cancer activity of *odonopsis bulleyana* Forest ex Diels, and its potential molecular mechanisms."

Authors: Luan Y, Li Y, Zhu L, Zheng S, Mao D, Chen Z, Cao Y

**Species**  
Human  
Artificial Control

**Dilution**  
1:200  
Not Cited

**Year**  
2018

Autophagy

#### A quantitative TR-FRET plate reader immunoassay for measuring autophagy.

"700712 was used in immunoprecipitation and western blot to develop a TR-FRET immuno-assay for the quantitative measurement of autophagy using GFP-tagged LC3B"

Authors: Hancock MK, Hermanson SB, Dolman NJ

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2012

### Western Blot (2)

Archiv der Pharmazie

#### Mannich Curcuminoids as Potent Anticancer Agents.

"Published figure using LC3B monoclonal antibody (Product # 700712) in Western Blot"

Authors: Gyuris M, Hackler L, Nagy LI, Alföldi R, Rédei E, Marton A, Vellai T, Faragó N, Ózsvári B, Hetényi A, Tóth GK, Sipos P, Kanizsai I, Puskás LG

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

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#### IP (1)

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