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Rabbit Anti-LC3B antibody

SL4843R

Product Name:	LC3B
Chinese Name:	自噬微管相关蛋白轻链β3抗体
Alias:	Microtubule-associated protein 1 light chain 3 beta; ATG8F; Autophagy related protein LC3 B; Autophagy related ubiquitin like modifier LC3 B; Autophagy-related protein LC3 B; Autophagy-related ubiquitin-like modifier LC3 B; MAP1 light chain 3 like protein 2; MAP1 light chain 3-like protein 2; MAP1A/1B light chain 3 B; MAP1A/1BLC3; MAP1A/MAP1B LC3 B; MAP1A/MAP1B light chain 3 B; MAP1ALC3; MAP1LC3B; Microtubule associated protein 1 light chain 3 beta; Microtubule associated proteins 1A/1B light chain 3B; Microtubule-associated protein 1 light chain 3 beta; Microtubule-associated proteins 1A/1B light chain 3B; MLP3B_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Cow,Danio rerio
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse Microtubule-associated proteins 1A/1B light chain 3B:1-50/125
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Microtubule-associated proteins (MAPs) regulate microtubule stability and play critical roles in neuronal development and in maintaining the balance between neuronal plasticity and rigidity. MAP-light chain 3 beta (MAP-LC3 Beta) and MAP-light chain 3 alpha (MAP-LC3 Alpha) are subunits of both MAP1A and MAP1B. MAP-LC3 Beta, a homolog of Apg8p, is essential for autophagy and associated to the autophagosome membranes after processing. Two forms of LC3 Beta, the cytosolic LC3-I and the membrane-bound LC3-II, are produced post-translationally. LC3-I is formed by the removal of the C-terminal 22 amino acids from newly synthesized LC3 Beta, followed by the conversion of a fraction of LC3-I into LC3-II. LC3 enhances fibronectin mRNA translation in ductus arteriosus cells through association with 60S ribosomes and binding to an AU-rich element in the 3' untranslated region of fibronectin mRNA. This facilitates sorting of fibronectin mRNA onto rough endoplasmic reticulum and translation. MAP LC3 Beta may also be involved in formation of autophagosomal vacuoles. It is expressed primarily in heart, testis, brain and skeletal muscle. **Function:** Probably involved in formation of autophagosomal vacuoles **Subunit:** 3 different light chains, LC1, LC2 and LC3, can associate with MAP1A and MAP1B proteins. Interacts at microtubules with CABP1 (via EF-hands 1 and 2) but not with calmodulin. Interacts with FYCO1 (via C-terminus). Interacts with TP53INP1 and TP53INP2. Interacts with TBC1D25. Directly interacts with SQSTM1; this interaction leads to MAP1LC3B recruitment to inclusion bodies containing polyubiquitinated protein aggregates and to inclusion body degradation by autophagy. **Subcellular Location:** Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor. Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Note=LC3-II binds to the autophagic membranes. **Tissue Specificity:** Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver. **Post-translational modifications:** 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. **SWISS:** Q9GZQ8

Gene ID:
81631

Database links:

Entrez Gene: 81631 Human

Entrez Gene: 427559 Chicken

Entrez Gene: 408001 Cow

Entrez Gene: 67443 Mouse

Entrez Gene: 64862 Rat

Omim: 609604 Human

SwissProt: O41515 Cow

SwissProt: Q9GZQ8 Human

SwissProt: Q9CQV6 Mouse

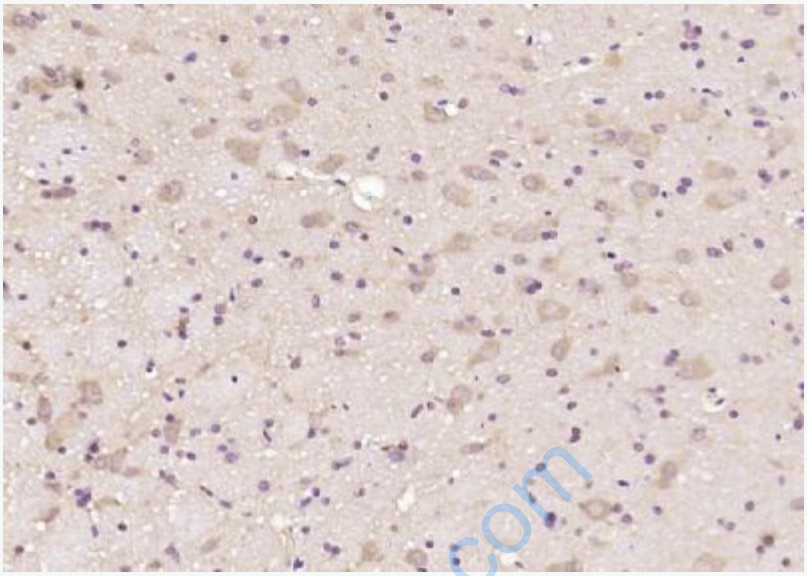
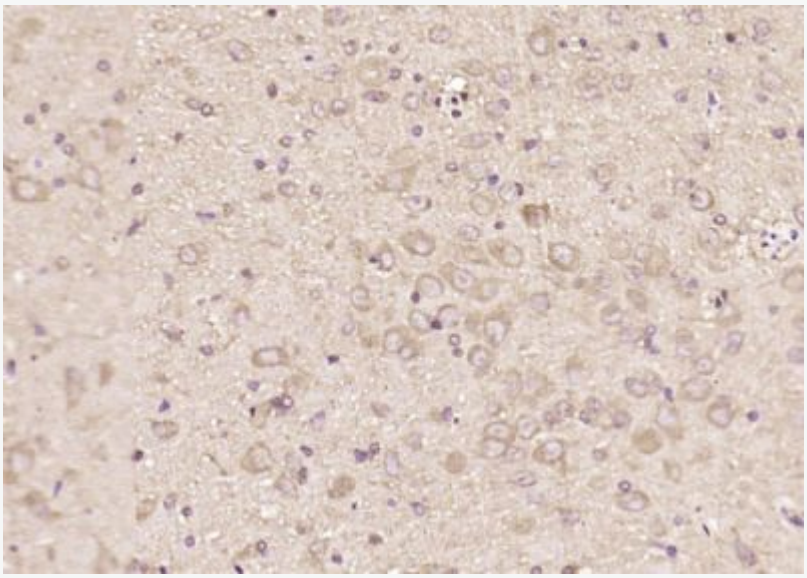
SwissProt: Q62625 Rat

Unigene: 356061 Human

Unigene: 28357 Mouse

Unigene: 41412 Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LC3B) Polyclonal Antibody, Unconjugated (SL4843R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining. 

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	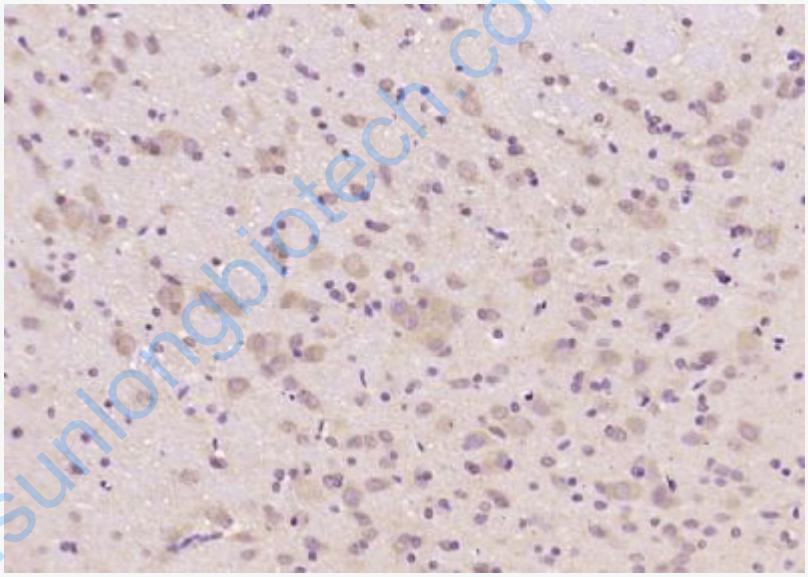
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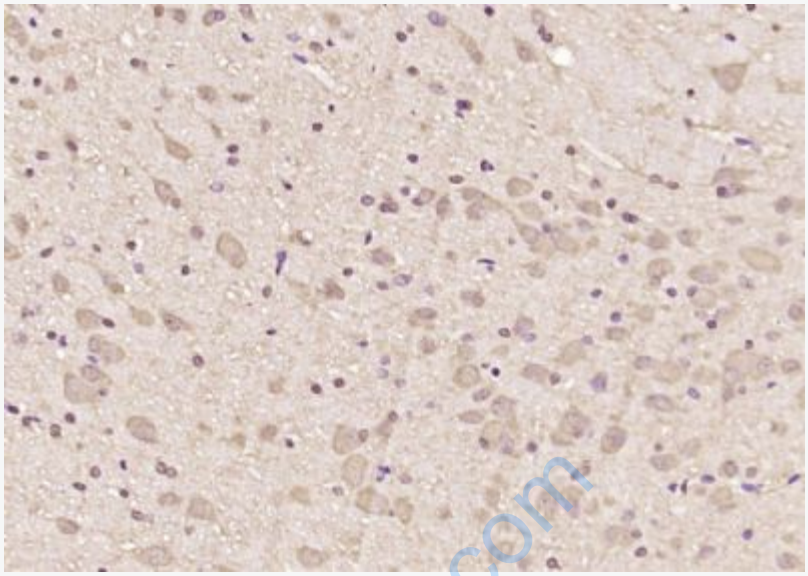

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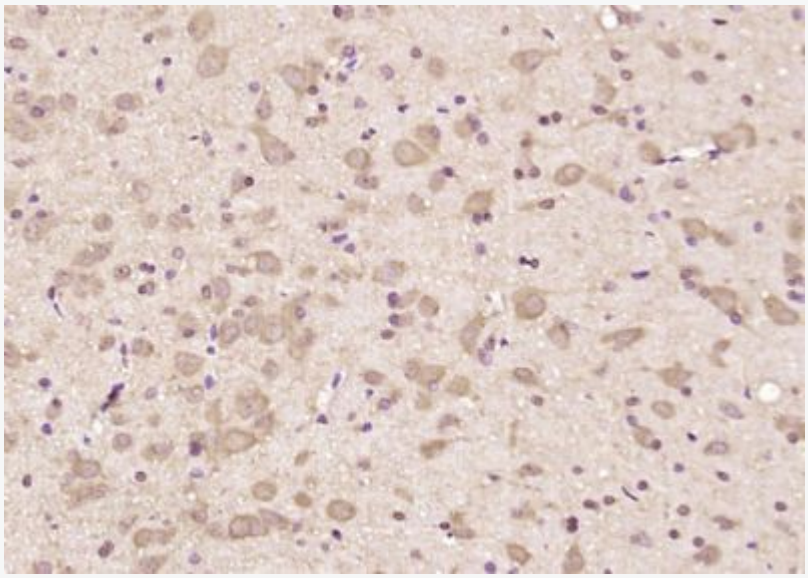

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	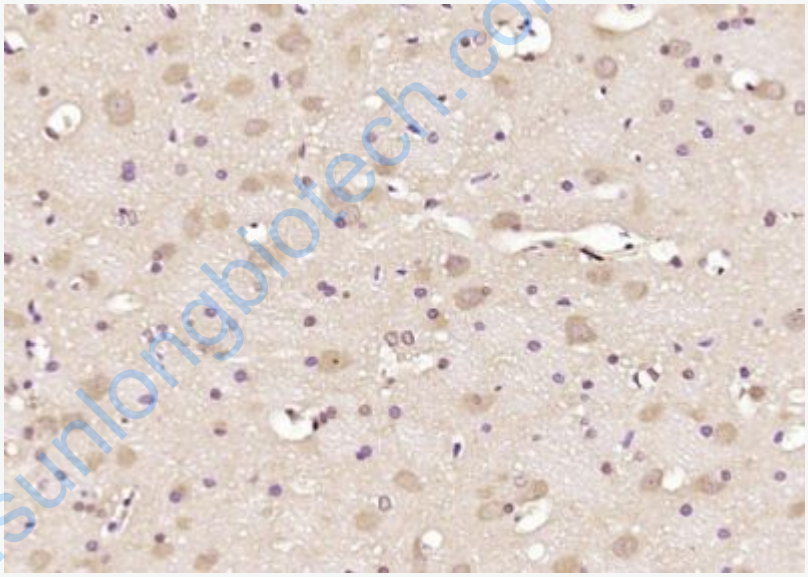
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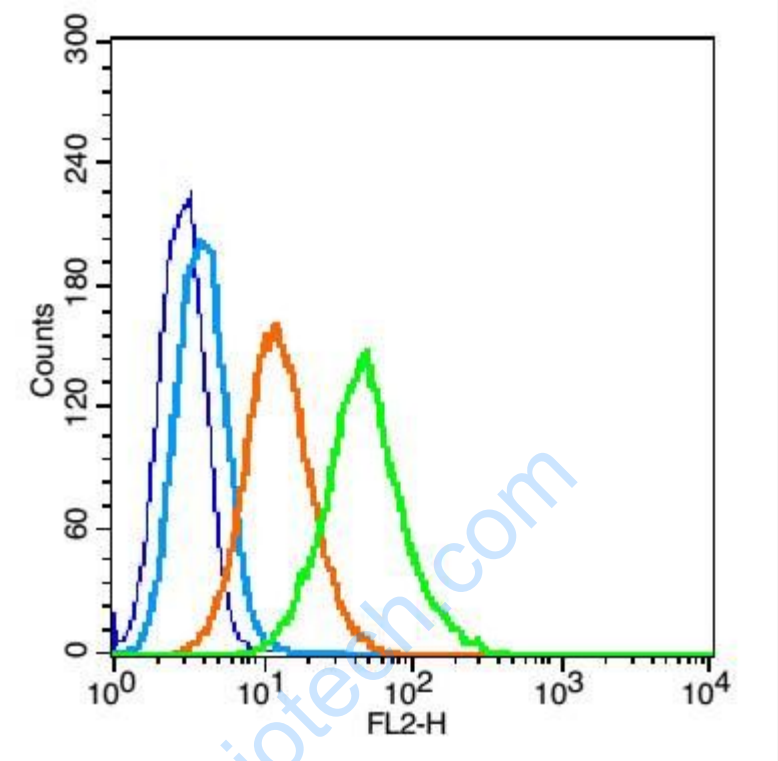

Blank control(blue): TM4 cells(fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti-LC3B antibody(SL4843R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.