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Anti-LC3B MAP1LC3B Rabbit Monoclonal Antibody

Catalog Number: M01524

Overview

Product Name	Anti-LC3B MAP1LC3B Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-LC3B MAP1LC3B Rabbit Monoclonal Antibody catalog # M01524. Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, ICC, WB
Clonality	Monoclonal IEC-13
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9GZQ8

Technical Details

Immunogen	A synthesized peptide derived from human LC3B
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200 IP 1:50

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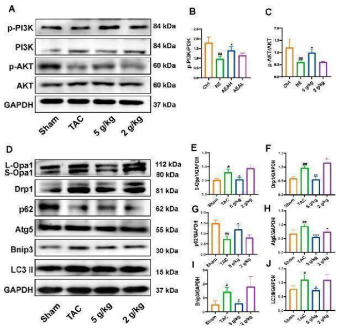
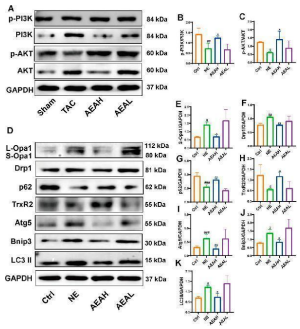
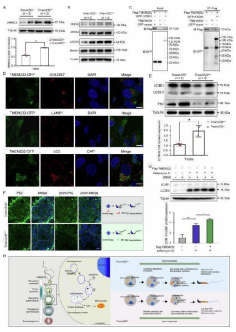
Anti-LC3B MAP1LC3B Rabbit Monoclonal Antibody (M01524) Images



AEA improved CHF via PI3K/AKT/Bnip3 axis. (A) Representative images of PI3K/AKT axis. (B, C) The phosphorylation level of PI3K and AKT. (D) Representative images of Opa1, Drp1, Bnip3, p62, Atg5 and LC3II. (E–J) The expression level of Opa1, Drp1, Bnip3, p62, Atg5 and LC3II. (n = 3).Index in PubMed under a CC BY license. PMID: 40206063



AEA improved NE-induced injuries via PI3K/AKT/Bnip3 axis. (A) Representative images of PI3K/AKT axis in H9c2 cells. (B, C) The phosphorylation level of PI3K and AKT. (D) Representative images of Opa1, Drp1, TrxR2, Bnip3, p62, Atg5 and LC3II in cells. (E–K) The expression level of Opa1, Drp1, TrxR2, Bnip3, p62, Atg5 and LC3II in H9c2 cells. (n = 3).Index in PubMed under a CC BY license. PMID: 40206063



TMEM232 functions in autophagy in testis. A Western blotting analysis for the comparison of ARMC3 protein levels between Tmem232 −/− (n = 2) and Tmem232 +/+ (n = 2) testes and sperms at 2-months-old. alpha-Tubulin served as a loading control. The corresponding optical density readings for each image are shown. The representative image of biological duplicates is shown. B Western blotting analysis revealed the protein levels of four subunits (VPS15, VPS34, ATG14, and Beclin1) of PIK3C3-C1 complex in the testes of 2-month-old Tmem232 +/+ (n = 2) and Tmem232 −/− (n = 2) male mice. alpha-Tubulin served as a loading control. The representative image of biological duplicates is shown. C Co-immunoprecipitation assay results revealed the interaction between the TMEM232 and ATG14 protein in cells. Anti-Flag beads were used for immunoprecipitation. Anti-Flag and anti-GFP antibodies were used for western blotting analysis. The results shown are representative of three independent experiments. The representative image of biological duplicates is shown. D TMEM232-GFP was partly colocalized with LC3 in HeLa cells. Subcellular localization of target proteins (red) was probed with an anti-GOLGI97 antibody (upper panel, marker of Golgi apparatus), an anti-LAMP1 antibody (middle panel, marker of lysosome), and an anti-LC3 antibody (lower panel, marker of autophagosome). Cell nuclei were counterstained with DAPI. Scale bars, 10 um. E The absence of TMEM232 in mice resulted in the accumulation of P62 and LC3. Tmem232 +/+ (n = 2) and Tmem232 −/− (n = 2) testes were separated and prepared for western blotting analysis. alpha-Tubulin served as a loading control. The corresponding optical density readings for each image are shown. The representative image of

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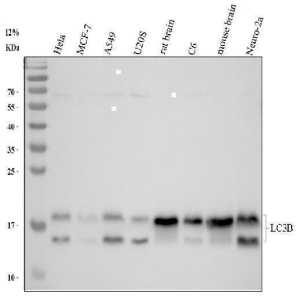
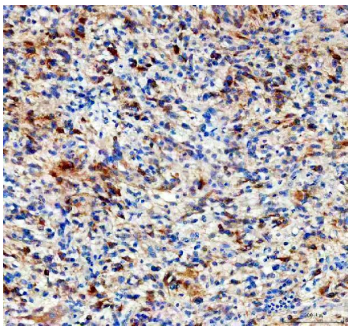
biological duplicates is shown. F Immunofluorescence staining of the P62 protein performed on frozen sections of Tmem232 +/+ (n = 2) and Tmem232 −/− (n = 2) testes. Blue, DAPI; green, P62. Scale bars, 20 um. G Western blotting analysis of LC3B protein levels in HeLa cells after Flag-TMEM232 overexpression treatment with or without bafilomycin A1 (BafA1, 50 nM) treatment. HeLa cells were pretreated with Baf-A1 for 1 h and transfected with p-TMEM232×3FLAG-Myc-CMV-24 plasmid for 24 h. alpha-Tubulin served as a loading control. The corresponding optical density readings for each image are shown below. The results shown are representative of three independent experiments. The representative image of biological duplicates is shown. H A proposed model for the assumption that TMEM232 is involved in autophagy to regulate sperm formation in mice. Index in PubMed under a CC BY license. PMID: 39516485



Western blot analysis of LC3B using anti-LC3B antibody (M01524). Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human U2OS whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse Neurao-2a whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LC3B antigen affinity purified monoclonal antibody (Catalog # M01524) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for LC3B at approximately 15, 18 kDa. The expected band size for LC3B is at 15 kDa.



IHC analysis of LC3B using anti-LC3B antibody (M01524). LC3B was detected in a paraffin-embedded section of human glioma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-LC3B Antibody (M01524) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of LC3B using anti-LC3B antibody (M01524). LC3B was detected in a paraffin-embedded section of mouse

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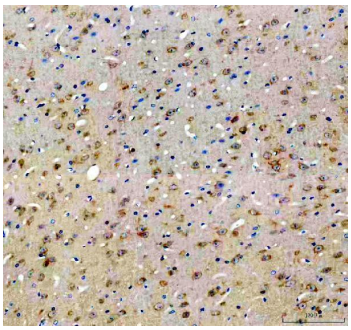
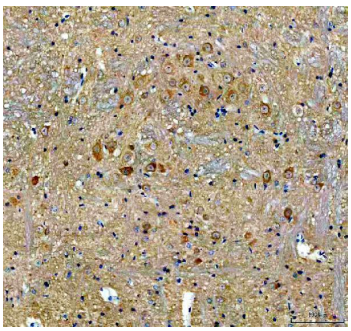
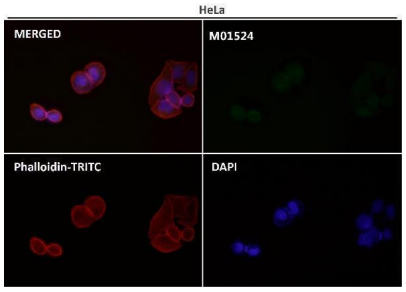


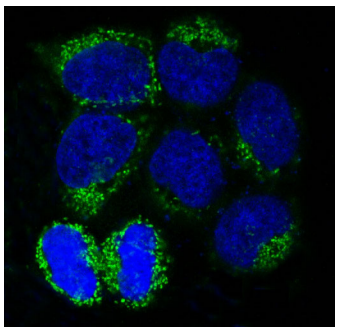
brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-LC3B Antibody (M01524) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of LC3B using anti-LC3B antibody (M01524). LC3B was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-LC3B Antibody (M01524) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis of Hela cells treated with choroquine, using LC3B Antibody.

4 Publications Citing This Product

1. PubMed ID: -, Zhang Tao,Xiaoqing Zhou,Yan Zhang,Wenfeng Pu,Yi Yang,Fuxia Wei,Qian Zhou,Lin Zhang,Zhonghan Du,Ji Wu,"Xi Lei San Attenuates Dextran Sulfate Sodium-Induced Colitis in Rats and TNF-alpha-Stimulated Colitis in CACO2 Cells: Involvement of the NLRP3 Inflammasome and Autophagy",Mediators of Inflammation,vol. 2021, Article ID 1610251,12 pages,2021.https://doi.org/10.1155/2021/1610251

2. PubMed ID: -, Xiaodong Zhou, Hongsheng Ouyang, Daxin Pang et al. Pathological Alterations in the Gastrointestinal Tract of a Porcine Model of DMD, 08 March 2021, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-267849/v1]

3. PubMed ID: 28031531, Overendocytosis of superparamagnetic iron oxide particles increases apoptosis and triggers autophagic cell death in

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human osteosarcoma cell under a spinning magnetic field

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