
LC3A Mouse mAb

Catalog Number: bsm-33309M

Target Protein: LC3A

Concentration: 1mg/ml

Form: Size : 50ul/100ul/200ul

Liquid

Size : 200ug (PBS only)

Lyophilized

Note: Centrifuge tubes before opening. Reconstitute the lyophilized product in distilled water. Optimal concentration should be determined by the end user.

Host: Mouse

Clonality: Monoclonal

Clone No.: 7G10

Isotype: IgG

Applications: **WB** (1:500-1000), **IHC-P** (1:100-500), **IHC-F** (1:100-500), **IF** (1:100-500), **ICC/IF** (1:25)

Reactivity: Human, Mouse, Rat

Predicted MW: 14/16 kDa

Subcellular Cell membrane ,Cytoplasm

Locations:

Entrez Gene: 81631

Swiss Prot: Q9GZQ8

Source: KLH conjugated synthetic peptide derived from human LC3A: 1-100/121.

Purification: affinity purified by Protein G

Storage: Size : 50ul/100ul/200ul

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Size : 200ug (PBS only)

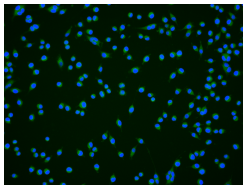
0.01M PBS

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

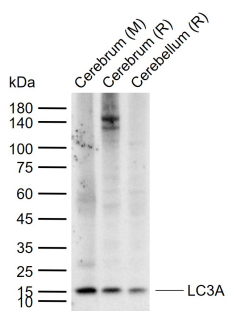
Background: A major contributor to cellular homeostasis is the ability of the cell to strike a balance between the formation and degradation/removal of its cellular components. This process of internal cellular turn-over is called autophagy (self-eating), and is facilitated by a pathway of around 16 interacting proteins in the human. LC3, a ubiquitin-like modifier protein, is the human homolog of yeast Apg8 and is involved in the formation of autophagosomal vacuoles, called autophagosomes. LC3 is expressed as 3 splice variants (LC3A, LC3B and LC3C), which exhibit different tissue distributions and are processed into cytosolic and

autophagosomal membrane-bound forms, termed LC3-I and LC3-II, respectively. A disruption to the autophagic process is now associated with the progression of several cancers, neurodegenerative disorders and cardiac pathologies, where LC3 is widely employed as a marker for autophagy.

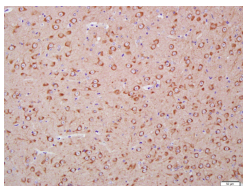
VALIDATION IMAGES



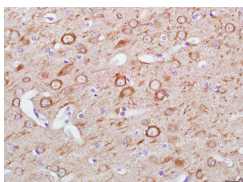
SH-SY5Y cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (LC3A) polyclonal Antibody, Unconjugated (bsm-33309M) 1:25, 90 minutes at 37°C; followed by a conjugated Goat Anti-Mouse IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



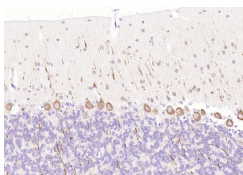
Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Rat Cerebrum tissue lysates Lane 3: Rat Cerebellum tissue lysates Primary: Anti-LC3A (bsm-33309M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 14/16 kDa Observed band size: 15 kDa



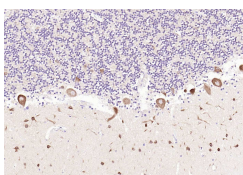
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LC3A) Monoclonal Antibody, Unconjugated (bsm-33309M) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



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 (LC3A) Monoclonal Antibody, Unconjugated (bsm-33309M) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); 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; Incubation with (LC3A) Monoclonal Antibody, Unconjugated (bsm-33309M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human cerebellum); 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; Incubation with (LC3A) Monoclonal Antibody, Unconjugated (bsm-33309M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

PRODUCT SPECIFIC PUBLICATIONS

[IF=6.1] Yunxiang Wang. et al. Corilagin attenuates intestinal ischemia/reperfusion injury in mice by inhibiting ferritinophagy-mediated ferroptosis through disrupting NCOA4-ferritin interaction. LIFE SCI. 2023 Oct;;122176 IF ; Mouse . 37858718

[IF=5.6] Kun Li. et al. Oxidative medicine and cellular longevity the role and mechanism of NCOA4 in ferroptosis induced by intestinal ischemia reperfusion. INT IMMUNOPHARMACOL. 2024 May;133:112155 IF ; Mouse . 38688134

[IF=2.1] Rong Hu. et al. Apatinib sensitizes chemoresistant NSCLC cells to doxorubicin via regulating autophagy and enhances the therapeutic efficacy in advanced and refractory/recurrent NSCLC. Mol Med Rep. 2020 Nov;22(5):3935-3943 WB,IHC ; Human . 32901884

[IF=1.5] Daoai Wu. et al. Autologous Platelet-Rich Gel Accelerates Diabetic Wound Healing Through Inhibition of Ferritinophagy. INT J LOW EXTR WOUND. ;(): IHC,WB ; Rat . 38839257