bsm-51460M **[Primary Antibody]**

LC3 Mouse mAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

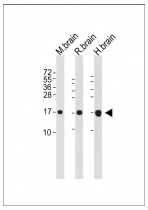
DATASHEET

Host: Mouse
Isotype: IgG1, k
Clonality: Monoclonal
CloneNo.: L3G1
GeneID: 81631
SWISS: Q9GZQ8
Target: LC3
Purification: affinity purified by Protein G
Concentration: 1mg/ml
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

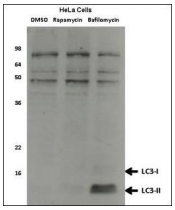
Background: A major contributor to cellular homeostasis is the ability of the cell to strike a balance between the formation and degradation/removal of its cellular components. This process of internal cellular turn-over is called autophagy (self-eating), and is facilitated by a pathway of around 16 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.

Applications: **WB** (1:500-1000)
Reactivity: Human, Mouse, Rat
Predicted MW.: 13 kDa
Subcellular Location: Cell membrane ,Cytoplasm

VALIDATION IMAGES



Sample: Lane 1: Brain (Mouse) Tissue Lysate Lane 2: Brain (Rat) Tissue Lysate Lane 3: Brain (Human) Tissue Lysate Primary: Anti-LC3 (bsm-51460M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 13 kD Observed band size: 17 kD



Sample: Human Hela cell lysates, which were treated with rapamycin or bafilomycin overnight. Data courtesy of Dr. David Rubinsztein, Cambridge Institute for Medical Research. Primary: Anti-LC3 (bsm-51460M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 13 kD Observed band size: 13 kD

SELECTED CITATIONS

- **[IF=13.281]** Jinjin Shi. et al. Photoactivated Self-Disassembly of Multifunctional DNA Nanoflower Enables Amplified Autophagy Suppression for Low-Dose Photodynamic Therapy. 2021 Oct 20 WB ;Human. 34672076
- **[IF=7.7]** Yundi Wu. et al. Fluorescent hyaluronic acid nanoprodrug: A tumor-activated autophagy inhibitor for synergistic cancer therapy. INT J BIOL MACROMOL. 2024 Aug;274:133360 WB ;Mouse. 38909736
- **[IF=6.025]** Xuliang Zhang. et al. PINK1/Parkin-mediated mitophagy mitigates T-2 toxin-induced nephrotoxicity. FOOD CHEM TOXICOL. 2022 Jun;164:113078 WB ;Mouse. 35489469

- **[IF=2.6]** Fan Jin. et al. Quercetin alleviates kidney damage caused by mercury Chloride: The protective effects of quercetin on autophagy and inflammation were studied based on TRIM32/TLR4/LC3 pathway. TOXICON. 2024 Sep;248:108031 IHC ;Mouse. 39033964