bs-11731R **[Primary Antibody]**

LC3A/B Rabbit pAb

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

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 81631 **SWISS:** Q9GZQ8

Target: LC3A/B

Immunogen: KLH conjugated synthetic peptide derived from human LC3A/B: 31-121/121.

Purification: affinity purified by Protein A

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.

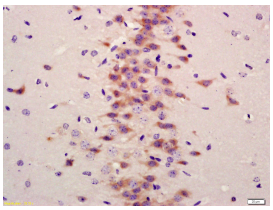
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse (predicted: Human, Rat, Pig, Sheep, Cow, Chicken, Dog)

Predicted MW.: 14 kDa

Subcellular Location: Cell membrane ,Cytoplasm

VALIDATION IMAGES



Tissue/cell: mouse brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-LC3A/B Polyclonal Antibody, Unconjugated(bs-11731R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SELECTED CITATIONS

- **[IF=8.2]** Xiaobin Wen. et al. The PI3K/Akt-Nrf2 Signaling Pathway and Mitophagy Synergistically Mediate Hydroxytyrosol to Alleviate Intestinal Oxidative Damage. INT J BIOL SCI. 2024; 20(11): 4258–4276 WB ;Pig. 39247828
- **[IF=4.7]** Chao Wang. et al. Protective Effect of Modified Suanmei-Tang on Metabolic-Associated Fatty Liver Disease: An

Integrated Strategy of Network Pharmacology, Metabolomics, and Transcriptomics. DRUG DES DEV THER. 2024 Nov 12 IHC ;Mouse. 39559790

- **[IF=3.5]** Muhammad Radwa N.. et al. Empagliflozin-activated AMPK elicits neuroprotective properties in reserpine-induced depression via regulating dynamics of hippocampal autophagy/inflammation and PKCζ-mediated neurogenesis. PSYCHOPHARMACOLOGY. 2024 Aug;:1-20 IHC ;Rat. 39158617
- **[IF=3]** Muhammad Abid Hayat. et al. Enhanced Autophagy in Damaged Laminar Tissue of Acute Laminitis Induced by Oligofructose Overloading in Dairy Cows. ANIMALS. 2023 Jan;13(15):2478 WB ;Bovine. 37570287
- **[IF=2.19]** Cui, Xiaodong, et al. "Changes of intracellular Ca2+ in quercetin-induced autophagy progression." Acta Biochimica et Biophysica Sinica (2015): gmv096. WB ;="Human". 26423114