bs-4005R **[Primary Antibody]**

ATG5/APG5L Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 9474 **SWISS:** Q9H1Y0

Target: ATG5/APG5L

Immunogen: KLH conjugated synthetic peptide derived from human APG5L: 101-200/275.

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: In yeast, autophagy is an essential process for survival during nutrient starvation and cell differentiation. The process of autophagy is characterized as a non-selective degradation of cytoplasmic proteins into membrane stuctures called autophagosomes, and it is dependent on several proteins, including the autophagy proteins APG5 and APG7. Yeast Apg7 and the human homolog, APG7, share similarities with the ubiquitin-activating enzyme E1 in Saccharomyces cerevisiae and are likewise responsible for enzymatically activating the autophagy conjugation system. Apg5 and the human homolog, APG5 (also designated apoptosis-specific protein or APS), function as substrates for the autophagy protein Apg12. These proteins are covalently bonded together to form Apg12/APG5 conjugates, which are required for the progression of autophagy.

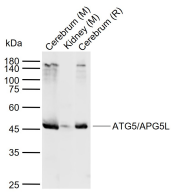
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)

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

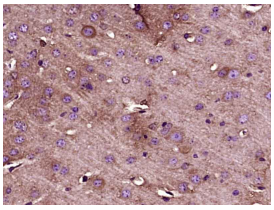
Predicted MW.: 32 kDa

Subcellular Location: Cytoplasm

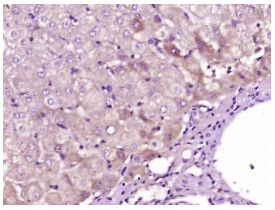
VALIDATION IMAGES



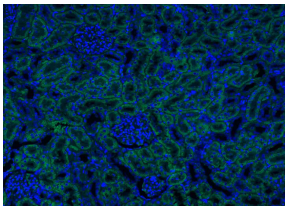
Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Mouse Kidney tissue lysates Lane 3: Rat Cerebrum tissue lysates Primary: Anti-ATG5/APG5 (bs-4005R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 32 kDa Observed band size: 47 kDa



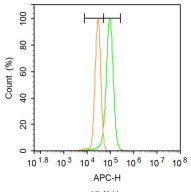
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5) Polyclonal Antibody, Unconjugated (bs-4005R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); 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 (ATG5) Polyclonal Antibody, Unconjugated (bs-4005R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded



Blank control: A431. Primary Antibody (green

(Rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATG5/APG5L) Polyclonal Antibody, Unconjugated (bs-4005R) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-rabbit IgG antibody (bs-0295G-AF488) for 90 minutes, and DAPI for nuclei staining.

line): Rabbit Anti-ATG5 antibody (bs-4005R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody: Goat anti-rabbit IgG-AF647 Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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,IF ;Human; Mouse. 34672076
- **[IF=10.588]** Jianzhao Liao. et al. Mitochondrial miR-1285 regulates copper-induced mitochondrial dysfunction and mitophagy by impairing IDH2 in pig jejunal epithelial cells. J Hazard Mater. 2022 Jan;422:126899 WB ;Pig. 34418838
- **[IF=9.988]** Yue Zhang. et al. Endoplasmic reticulum stress-controlled autophagic pathway promotes polystyrene microplastics-induced myocardial dysplasia in birds. ENVIRON POLLUT. 2022 Oct;311:119963 WB ;Chicken. 35973452
- **[IF=8.5]** Yuanliang Li. et al. Chondroitin sulfate reverses tibial dyschondroplasia, broiler chondrocyte proliferation and differentiation dysfunction via the CHST11/β-Catenin pathway. INT J BIOL MACROMOL. 2025 May;:144488 IHC,IF,WB ;Broiler. 40409655
- **[IF=7.4]** Liu Nannan. et al. Resveratrol attenuates inflammation and fibrosis in rheumatoid arthritis-associated interstitial lung disease via the AKT/TMEM175 pathway. J TRANSL MED. 2024 Dec;22(1):1-19 WB ;Mouse. 38745204