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## ATG5/APG5L Mouse mAb

Catalog Number: bsm-33385M

Target Protein: ATG5/APG5L

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.: 5D7

Isotype: IgG

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

Reactivity: Human, Mouse, Rat

Predicted MW: 32 kDa

Subcellular Cytoplasm

Locations:

Entrez Gene: 9474

Swiss Prot: Q9H1Y0

Source: Recombinant human ATG5 Protein: full length.

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)

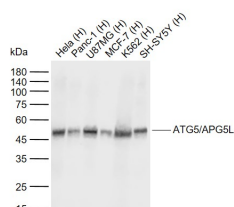
0.01M PBS

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

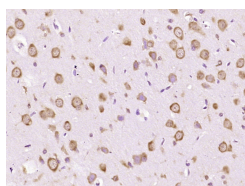
**Background:** In yeast, autophagy is an essential process for survival during nutrient starvation and cell differentiation. The process of autophagy is characterized as a non-selective degradation of cytoplasmic proteins into membrane structures called autophagosomes, and it is dependent on several 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/ATG5 conjugates, which are required for the progression of autophagy.

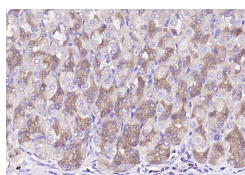
## VALIDATION IMAGES



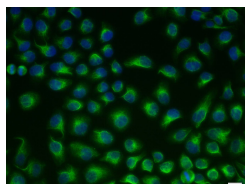
Sample: Lane 1: Human Hela cell lysates Lane 2: Human Panc-1 cell lysates Lane 3: Human U87MG cell lysates Lane 4: Human MCF-7 cell lysates Lane 5: Human K562 cell lysates Lane 6: Human SH-SY5Y cell lysates Primary: Anti- ATG5/ATG5L (bsm-33385M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 32 kDa Observed band size: 45 kDa



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 (ATG5/ATG5L) Monoclonal Antibody, Unconjugated (bsm-33385M) at 1:800 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat stomach); 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) Monoclonal Antibody, Unconjugated (ascites of bsm-33385M 5D7) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



Hela 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 (ATG5/ATG5L) monoclonal Antibody, Unconjugated (bsm-33385M) 1:100, 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.

## PRODUCT SPECIFIC PUBLICATIONS

**[IF=7.963]** Jianzhao Liao. et al. Gut microbiota disturbance exaggerates battery wastewater-induced hepatotoxicity through a gut-liver axis. Sci Total Environ. 2022 Feb;809:152188 WB ; Mouse . 34875328

**[IF=5.4]** Xiaobo Xu. et al. CD74-ROS1 L2026M mutant enhances autophagy through the MEK/ERK pathway to promote invasion, metastasis and crizotinib resistance in non-small cell lung cancer cells. FEBS J. 2023 Dec; WB ; Human . 38148635