

bs-3464R**[Primary Antibody]****phospho-ATG1 (Ser556) Rabbit pAb****Bioss**
ANTIBODIES

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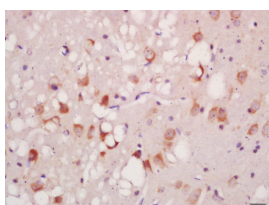
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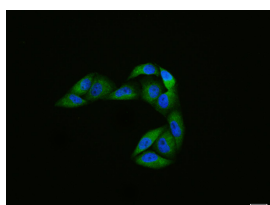
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— DATASHEET —

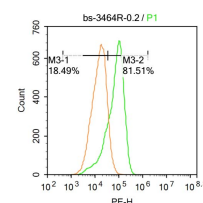
Host: Rabbit	Isotype: IgG	Applications: IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) Flow-Cyt (3ug/test) ICC/IF (1:100) ELISA (1:5000-10000) Reactivity: Human, Mouse, Rat, Rabbit (predicted: Pig, Horse) Predicted MW.: 116 kDa Subcellular Location: Cytoplasm
Clonality: Polyclonal		
GeneID: 8408	SWISS: O75385	
Target: ATG1 (Ser556)		
Immunogen: KLH conjugated Synthesised phosphopeptide derived from human ATG1/ULK1 around the phosphorylation site of Ser556: LH(p-S)AP.		
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: ULK1 belongs to the serine/threonine protein kinase family. It is involved in axon growth and plays an essential role in neurite branching during sensory axon outgrowth. Knockdown of ULK1 results in impaired endocytosis of nerve growth factor (NGF), excessive axon arborization, and severely stunted axon elongation indicating that ULK1 mediates a non clathrin coated endocytosis in sensory growth cones. Knockdown of ULK1 also inhibits the autophagic response. It appears to act as a convergence point for multiple signals that regulate autophagy, and in turn interacts with a large number of autophagy related (Atg) proteins.		

— VALIDATION IMAGES —

Tissue/cell: rat 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-Phospho-ATG1(Ser556) Polyclonal Antibody, Unconjugated(bs-3464R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) 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 (Phospho-ATG1 (Ser556)) polyclonal Antibody, Unconjugated (bs-3464R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control:A549. Primary Antibody (green line): Rabbit Anti-Phospho-ATG1(Ser556) antibody (bs-3464R) Dilution: 1μg /10⁶ cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 3μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 20% 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 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=7.675]** Ramona D' Amico. et al. Complex Interplay between Autophagy and Oxidative Stress in the Development of Endometriosis. ANTIOXIDANTS-BASEL. 2022 Dec;11(12):2484 WB ;Rat. 36552692

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=4.571]** Peng Lin. et al. Polystyrene nanoplastics exacerbate lipopolysaccharide-induced myocardial fibrosis and autophagy in mice via ROS/TGF- β 1/Smad. TOXICOLOGY. 2022 Oct;480:153338 WB ;Mouse. 36167198
- **[IF=3.322]** Chunli Yang. et al. BMAL1 involved in autophagy and injury of thoracic aortic endothelial cells of rats induced by intermittent heat stress through the AMPK/mTOR/ULK1 pathway. BIOCHEM BIOPH RES CO. 2023 Jun;661:34 WB ;Rat. 37086572