

bs-4002R**[Primary Antibody]****phospho-AMPK alpha-2 (Thr172) Rabbit pAb****BioSS**
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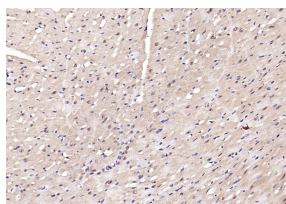
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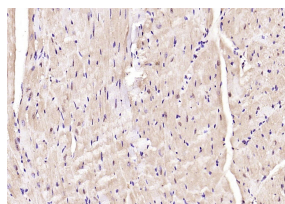
400-901-9800

— DATASHEET —

Host: Rabbit	Isotype: IgG	Applications: IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) Flow-Cyt (1ug/test)
Clonality: Polyclonal		
GeneID: 5563	SWISS: P54646	
Target: AMPK alpha-2 (Thr172)		
Immunogen: KLH conjugated Synthesised phosphopeptide derived from human AMPK alpha 2 around the phosphorylation site of Thr172: LR(p-T)SC.		Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Sheep, Cow, Chicken, Dog, Horse)
Purification: affinity purified by Protein A		Predicted MW.: 64 kDa
Concentration: 1mg/ml		Subcellular Location: Cytoplasm ,Nucleus
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: The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia. [provided by RefSeq, Jul 2008]		

— VALIDATION IMAGES —

Paraformaldehyde-fixed, paraffin embedded (rat heart); 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 (phospho-AMPK alpha-2 (Thr172)) Polyclonal Antibody, Unconjugated (bs-4002R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse heart); 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 (phospho-AMPK alpha-2 (Thr172)) Polyclonal Antibody, Unconjugated (bs-4002R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

— SELECTED CITATIONS —

- **[IF=14.1]** Cheng Huang. et al. NIBV Induces Incomplete Autophagy via AMPK-TFEB, Causing Kidney Injury in Chicks. ADV SCI. 2026 Apr;;e14993 WB ;Chicken. 41955488
- **[IF=9.043]** Jianfei Pan. et al. Fecal Microbiota Was Reshaped in UCP1 Knock-In Pigs via the Adipose-Liver-Gut Axis and

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

Contributed to Less Fat Deposition. MICROBIOL SPECTR. 2023 Jan 23 WB ;Human. 36688695

- **[IF=7.7]** Bing Yang. et al. Hovenia dulcis (Guaizao) polysaccharide ameliorates hyperglycemia through multiple signaling pathways in rats with type 2 diabetes mellitus. INT J BIOL MACROMOL. 2024 Dec;;138338 WB ;Rat. 39638196
- **[IF=7.129]** Shuaiqi Han. et al. Enhanced autophagy reversed aflatoxin B1-induced decrease in lactate secretion of dairy goat Sertoli cells. ECOTOX ENVIRON SAFE. 2023 Jul;259:115063 WB ;Sheep. 37229875
- **[IF=6.8]** Khan, Mohammad Badruzzaman. et al. Exercise Improves Cerebral Blood Flow and Functional Outcomes in an Experimental Mouse Model of Vascular Cognitive Impairment and Dementia (VCID). TRANSL STROKE RES. 2023 Jan;;1-16 FCM ;Mouse. 36689081