bs-4002R **[Primary Antibody]**

phospho-AMPK alpha-2 (Thr172) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

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.

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: 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]

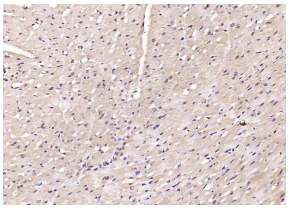
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/test)

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

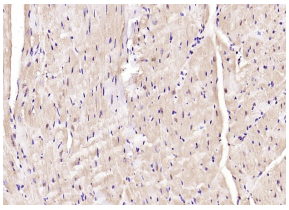
Predicted MW.: 64 kDa

Subcellular Location: Cytoplasm ,Nucleus

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) instructionsand DAB staining.



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SELECTED CITATIONS

- **[IF=9.043]** Jianfei Pan. et al. Fecal Microbiota Was Reshaped in UCP1 Knock-In Pigs via the Adipose-Liver-Gut Axis and 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
- **[IF=6.551]** Tang S et al. High ammonia exposure regulates lipid metabolism in the pig skeletal muscle via mTOR pathway. Sci Total Environ. 2020 Oct 20;740:139917. WB ;Pig. 32563870