



## phospho-AMPK alpha-2 (Thr172) Rabbit pAb

Catalog Number: bs-4002R

Target Protein: phospho-AMPK alpha-2 (Thr172)

Concentration: 1mg/ml

Form: Liquid Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

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 Entrez Gene: 5563 Swiss Prot: P54646

Source: 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

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

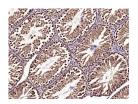
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase

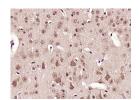
(AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA 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]

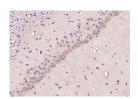
## **VALIDATION IMAGES**



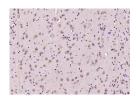
Paraformaldehyde-fixed, paraffin embedded (Rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-AMPK alpha-2 (Thr172)) Polyclonal Antibody, Unconjugated (bs-4002R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



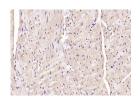
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-AMPK alpha-2 (Thr172)) Polyclonal Antibody, Unconjugated (bs-4002R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



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 (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 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 (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.



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.

## PRODUCT SPECIFIC PUBLICATIONS

[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