
AMPK alpha 2 Rabbit pAb

Catalog Number: bs-2771R

Target Protein: AMPK alpha 2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

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

Predicted MW: 62 kDa

Entrez Gene: 5563

Swiss Prot: P54646

Source: KLH conjugated synthetic peptide derived from human AMPK alpha 2: 351-450/552.

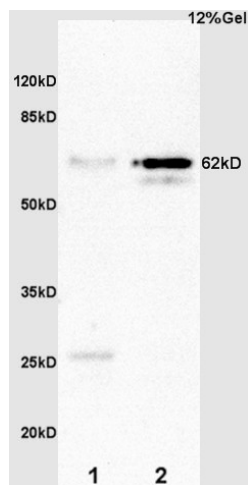
Purification: affinity purified by Protein A

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

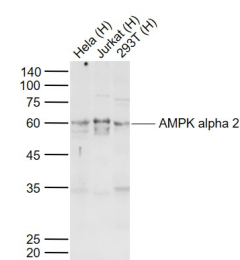
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

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]

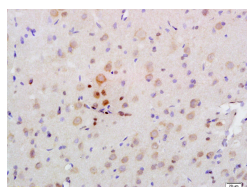
VALIDATION IMAGES



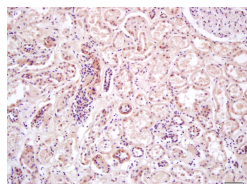
Sample: Lane1: Brain(Rat) Lysate at 30 ug Lane2: Heart(Rat) Lysate at 30 ug Primary: Anti-PRKAA2/AMPK alpha 2 (bs-2771R) at 1:200 dilution; Secondary: HRP conjugated Goat Anti-Rabbit IgG(bs-0295G-HRP) at 1:3000 dilution; Predicted band size : 62kD Observed band size : 62kD



Sample: Lane 1: HeLa (Human) Cell Lysate at 30 ug Lane 2: Jurkat (Human) Cell Lysate at 30 ug Lane 3: 293T (Human) Cell Lysate at 30 ug Primary: Anti-AMPK alpha 2 (bs-2771R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kD Observed band size: 60 kD



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-PRKAA2/AMPK alpha 2 Polyclonal Antibody, Unconjugated(bs-2771R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human kidney 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-PRKAA2/AMPK alpha 2 Polyclonal Antibody, Unconjugated(bs-2771R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

PRODUCT SPECIFIC PUBLICATIONS

[IF=8.073] Shuang-Feng Xu. et al. Astrocyte-specific loss of lactoferrin influences neuronal structure and function by interfering with cholesterol synthesis. GLIA. 2022 Aug;; WB ; Mouse . 35946355

[IF=7.31] Wei Ruyuan. et al. Silencing TUFM Inhibits Development of Monocrotaline-Induced Pulmonary Hypertension by Regulating Mitochondrial Autophagy via AMPK/mTOR Signal Pathway. OXID MED CELL LONGEV. 2022;2022:4931611 WB ; Rat, Human . 35936222

[IF=4.831] Zhang Q et al. CTRP13 attenuates the expression of LN and CAV-1 Induced by high glucose via CaMKKβ/AMPK pathway in rLSECs. Aging (Albany NY). 2020 Jun 17;12(12):11485-11499. WB ; Rat . 32554851

[IF=3.8] Weipeng Zhang. et al. Cross-generational effects of dietary sea buckthorn on non-alcoholic fatty liver disease in offspring of obese female mice. J FUNCT FOODS. 2024 Oct;121:106398 WB ; Mouse . 10.1016/j.jff.2024.106398

[IF=4.35] Songsong Jiang. et al. A Comparison Study on the Therapeutic Effect of High Protein Diets Based on Pork Protein versus Soybean Protein on Obese Mice. FOODS. 2022 Jan;11(9):1227 WB ; Mouse . 35563950