
phospho-AMPK alpha 1 (Ser356) Rabbit pAb

Catalog Number: bs-14318R

Target Protein: phospho-AMPK alpha 1 (Ser356)

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), Flow-Cyt (1ug/Test)

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

Predicted MW: 64 kDa

Entrez Gene: 5562

Source: KLH conjugated Synthesised phosphopeptide derived from human AMPK alpha 1 around the phosphorylation site of Ser356: AT(p-S)PP.

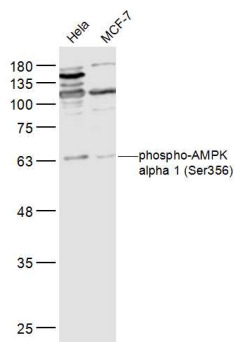
Purification: affinity purified by Protein A

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

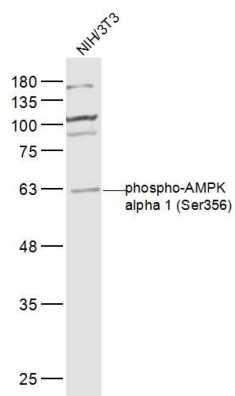
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

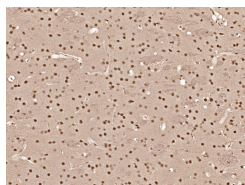
VALIDATION IMAGES



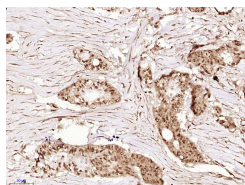
Sample: HeLa(Human) CellLysate at 30 ug MCF-7(Human) CellLysate at 30 ug Primary: Anti-phospho-AMPK alpha 1 (Ser356) (bs-14318R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 63 kD Observed band size: 63 kD



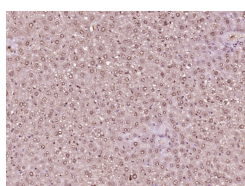
Sample: NIH/3T3(Mouse) Cell Lysate at 30 ug Primary: Anti-phospho-AMPK alpha 1 (Ser356) (bs-14318R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 63 kD Observed band size: 63 kD



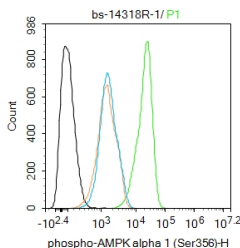
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-AMPK alpha 1 (Ser356)) Polyclonal Antibody, Unconjugated (bs-14318R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human cervical carcinoma); 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 1 (Ser356)) Polyclonal Antibody, Unconjugated (bs-14318R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse liver); 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 1 (Ser356)) Polyclonal Antibody, Unconjugated (bs-14318R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control (black line) :HepG2. Primary Antibody (green line): Rabbit Anti-phospho-AMPK alpha 1 (Ser356) antibody (bs-14318R) Dilution:1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min 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.

PRODUCT SPECIFIC PUBLICATIONS

[IF=6.656] Mingjuan Yang, et al. Rosmarinic acid potentiates and detoxifies tacrine in combination for Alzheimer's disease.

PHYTOMEDICINE. 2022 Dec;:154600 WB ; Mouse . 36610144

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

[IF=5.6] Yanan Wang. et al. Vitamin D3 promotes gastric cancer cell autophagy by mediating p53/AMPK/mTOR signaling. FRONT PHARMACOL. 2023; 14: 1338260 WB ; Human . 38259281

[IF=4.6] Ziyin Lu. et al. Quercetin and AMPK: A Dynamic Duo in Alleviating MG-Induced Inflammation via the AMPK/SIRT1/NF- κ B Pathway. MOLECULES. 2023 Jan;28(21):7388 IHC ; Chicken . 37959807

[IF=3.776] Qidang Duan. et al. LOX-1 attenuates high glucose-induced autophagy via AMPK/HNF4 α signaling in HLSECs. HELIYON. 2022 Dec;8:e12385 WB ; Human . 36590506

[IF=3.7] Wei Yu. et al. Glucose promotes cell growth and casein synthesis via ATF4/Nrf2-Sestrin2- AMPK-mTORC1 pathway in dairy cow mammary epithelial cells. ANIM BIOTECHNOL. 2023 Jul 12 WB ; Bovine . 37435839