

Anti-Phospho-AMPK alpha 1 (Ser356) Polyclonal Antibody

Product Details

| | |
|-------------------|--|
| Ig Type: | IgG |
| Reactivity: | Human, Mouse (predicted: Rat, Dog, Cow, Horse, Sheep, Pig) |
| Molecular Weight: | Theoretical: 64 kDa. Actual: 64 kDa. |
| Purification: | Protein A purified |

Applications

1. Paraformaldehyde-fixed, paraffin embedded (Human cervical carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (phospho-AMPK alpha 1 (Ser356)) Polyclonal Antibody, Unconjugated (TMAB-01386) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

2. Paraformaldehyde-fixed, paraffin embedded (Mouse liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (phospho-AMPK alpha 1 (Ser356)) Polyclonal Antibody, Unconjugated (TMAB-01386) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

3. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (phospho-AMPK alpha 1 (Ser356)) Polyclonal Antibody, Unconjugated (TMAB-01386) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

Verified Activity:

4. Sample:

Hela (Human) Cell Lysate at 30 µg

MCF-7 (Human) Cell Lysate at 30 µg

Primary: Anti-phospho-AMPK alpha 1 (Ser356) (TMAB-01386) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 63 kDa

Observed band size: 63 kDa

5. Sample:

NIH/3T3 (Mouse) Cell Lysate at 30 µg

Primary: Anti-phospho-AMPK alpha 1 (Ser356) (TMAB-01386) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 63 kDa

Observed band size: 63 kDa

6. Blank control (black line): HepG2. Primary Antibody (green line): Rabbit Anti-phospho-AMPK alpha 1 (Ser356) antibody (TMAB-01386)

Dilution: 1 µg/Test;

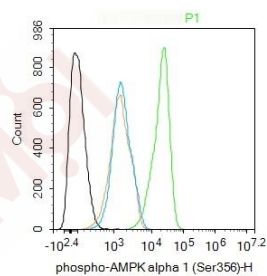
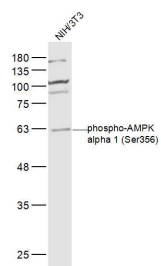
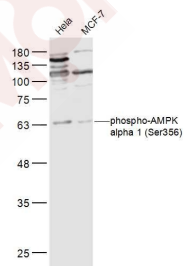
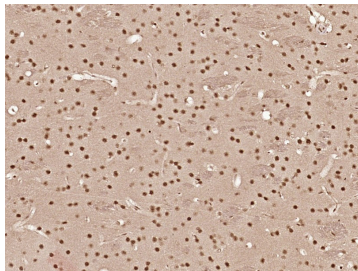
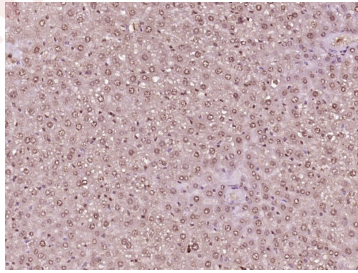
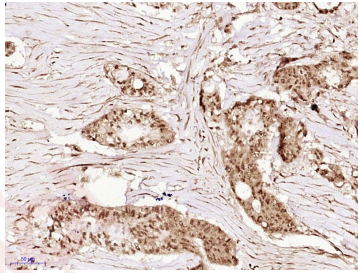
Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF488

Dilution: 0.5 µg/Test.

Isotype control (orange line): Normal Rabbit IgG

Protocol

The cells were fixed with 4% PFA (10 min 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.



A DRUG SCREENING EXPERT

Application: FCM,IF,IHC-Fr,IHC-P,WB

Recommended WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500; FCM: 1ug/Test

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: KLH conjugated Synthesised phosphopeptide: human AMPK alpha 1 around the phosphorylation site of Ser356

Antigen Species: Human

Gene ID: 5562

Synonyms: 5 AMP activated protein kinase alpha 1 catalytic subunit; AMPK-a; AAPK1; wu:fa94c10; SNF1-like protein AMPK; C130083N04Rik; AMPK 1; AMPKa1; AMPK a1; AMPK AMPK- α 1; AMPKalpha1; AMPK1; acetyl CoA carboxylase kinase; AMP-activated protein kinase, catalytic, alpha-1; hormone sensitive lipase kinase; AMPK alpha 1 (p-Ser356); AMPK alpha-1; p-AMPK alpha 1 (Ser356); AI450832; p-AMPK alpha 1 (S356); PRKAA 1; PRKAA1; AMPK; AMPK α 1; HMG CoA reductase kinase; 5 AMP activated protein kinase catalytic alpha 1 chain; MGC57364; AI194361; 5' AMP activated protein kinase catalytic subunit alpha 1; Protein kinase AMP activated alpha 1 catalytic subunit; AL024255; AMPK alpha 1 (p-S356); AMPK α 1; kinase AMPK alpha1; AMPK α 1; AMP-activate kinase alpha 1 subunit; AMPK α 1; EC 2.7.11.1; im:7154392; MGC33776; AMPK alpha 1 chain; cb116

Biology Area: Integration of energy metabolism, Response to hypoxia, Metabolism, Integration of energy, Fatty acids, Hypoxia, Fatty acid oxidation, Cancer, Neurodegenerative disease, Amyloid, Other Kinases

Research 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]

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