

Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb

Catalog No.: AP1441 Recombinant 5 Publications

Basic Information

Observed MW

62kDa/

Calculated MW

64kDa/65kDa/62kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB, ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC62278

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.

Recommended Dilutions

WB 1:1000 - 1:5000

ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

 Gene ID
 Swiss Prot

 5562/5563
 Q13131/P54646

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

AMPKa1/AMPKa2; Phospho-AMPK α 1-T183+AMPK α 2-T172

Contact

www.abclonal.com

Product Information

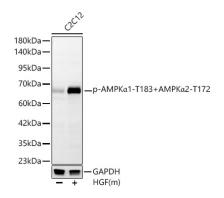
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from C2C12 cells, using Phospho-AMPKa1-

T183/AMPKa2-T172 Rabbit mAb (AP1441) at 1:1000 dilution. C2C12 cells were treated with mHGF(50ng/uL).

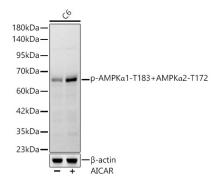
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Western blot analysis of lysates from C6 cells, using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit mAb (AP1441) at 1:1000 dilution. C6 cells were treated with AICAR (0. 5 mM) at 37°C for 30 minutes after serum-starvation overnight.

mivi) at 37 C for 30 minutes after serum-starvation overnight.

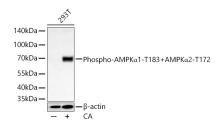
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Western blot analysis of lysates from 293T cells using Phospho-AMPKα1-

T183+AMPK α 2-T172 Rabbit mAb (AP1441) at 1:1000 dilution incubated overnight at 4°C. 293T cells were treated with CA (100 nM) at 37°C for 30 minutes after serum-starvation overnight.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.