

Phospho-AMPK α 1-T183/AMPK α 2-T172 Rabbit pAb

Catalog No.: AP0116 **13 Publications**

Basic Information

Catalog No.

AP0116

Observed MW

64kDa

Calculated MW

64kDa/65kDa

Category

Primary antibody

Applications

WB, IHC, IP

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:500 - 1:2000
IHC	1:50 - 1:100
IP	1:50 - 1:100

Contact

 | www.abclonal.com

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]

Immunogen Information

Gene ID

5562/5563

Swiss Prot

Q13131/P54646

Immunogen

A phospho specific peptide corresponding to residues surrounding T172 of human AMPK α

SynonymsAMPK α 1/AMPK α 2

Product Information

Source

Rabbit

Isotype

IgG

Purification

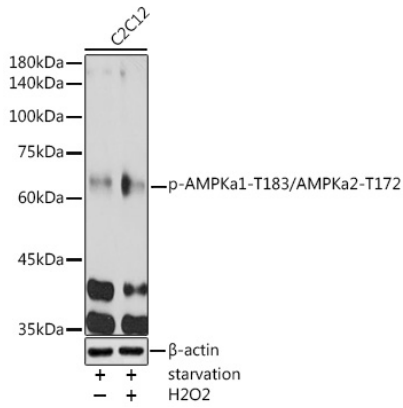
Affinity purification

Storage

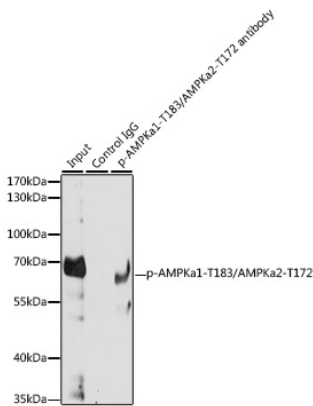
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

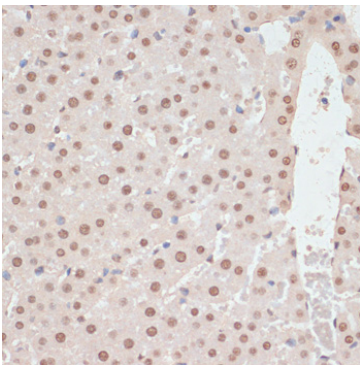
Validation Data



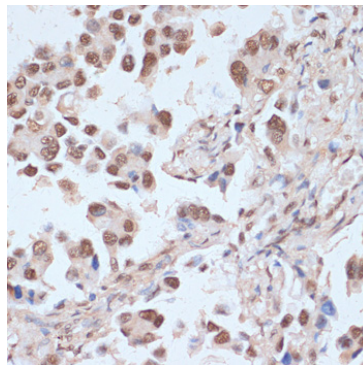
Western blot analysis of extracts of C2C12 cells, using Phospho-AMPKa1-T183/AMPKa2-T172 antibody (AP0116) at 1:1000 dilution. C2C12 cells were treated by Hydrogen Peroxide (2 nM) at 37°C for 15 minutes after serum-starvation overnight.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.



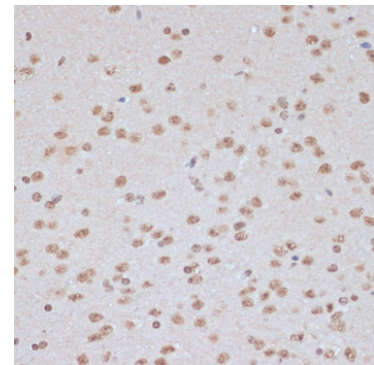
Immunoprecipitation analysis of 200ug extracts of C2C12 cells, using 3 ug Phospho-AMPKa1-T183/AMPKa2-T172 pAb (AP0116). Western blot was performed from the immunoprecipitate using Phospho-AMPKa1-T183/AMPKa2-T172 pAb (AP0116) at a dilution of 1:1000. C2C12 cells were treated by oligomycin (0.5 uM) at 37°C for 30 minutes.



Immunohistochemistry of paraffin-embedded rat liver using Phospho-PRKAA1-T183-PRKAA2-T172 antibody (AP0116) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human lung cancer using Phospho-PRKAA1-T183-PRKAA2-T172 antibody (AP0116) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using Phospho-PRKAA1-T183-PRKAA2-T172 antibody (AP0116) at dilution of 1:100 (40x lens).