Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb

Catalog No.: AP0432 **19 Publications**

Basic Information

Observed MW
64kDa

Calculated MW
64kDa/65kDa/62kDa

Category
Primary antibody

Applications
WB,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

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	1:500 - 1:1000
IHC-P	1:200 - 1:800
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
5562/5563

Swiss Prot
Q13131/P54646

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

Synonyms
AMPKa1/AMPKa2; Phospho-AMPKa1-T183/AMPKa2-T172

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

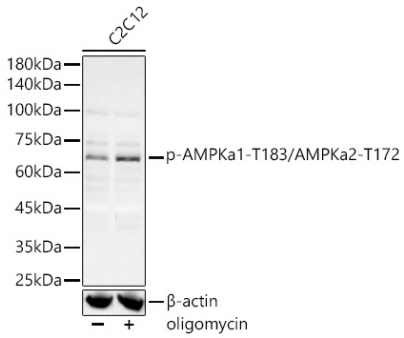
Source
Rabbit

Isotype
IgG

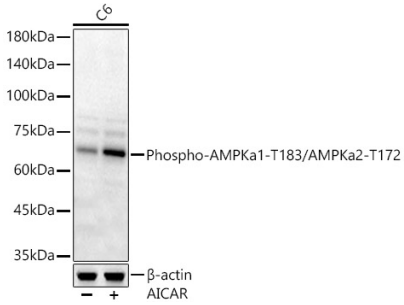
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

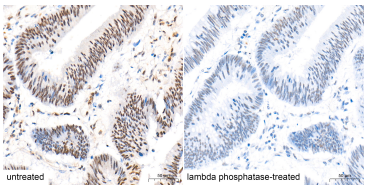
Validation Data



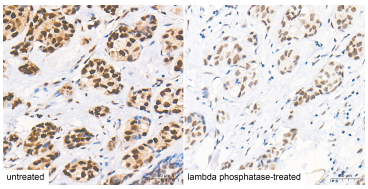
Western blot analysis of lysates from C2C12 cells, using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at 1:400 dilution. C2C12 cells were treated with oligomycin (0. 5 uM) at 37℃ for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.



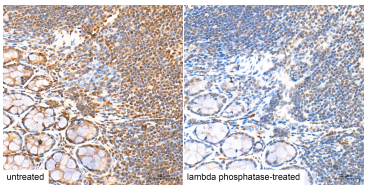
Western blot analysis of lysates from C6 cells, using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at 1:1000 dilution. C6 cells were treated with AICAR (0.5 mM) at 37℃ for 30 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

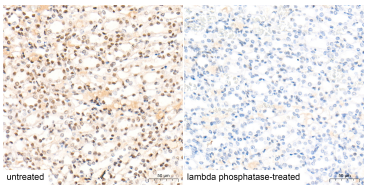


Immunohistochemistry analysis of paraffin-embedded Human breast cance tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat kidney tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKa1-T183/AMPKa2-T172 Rabbit pAb (AP0432) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.