

Phospho-AMPK α 1-T183+AMPK α 2-T172 Rabbit mAb

Catalog No.: AP1656 **Recombinant**

Basic Information

Observed MW

62 kDa

Calculated MW

62 kDa/64 kDa/65 kDa

Category

Primary antibody

Applications

WB, IHC-P, ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC3961

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 1:4000 - 1:20000**IHC-P** 1:150 - 1:600

ELISA Recommended starting concentration is 1 μ g/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ($\geq 1:10000$) a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

5562/5563

Swiss Prot

P54646/Q13131

Immunogen

This information is considered to be commercially sensitive.

Synonyms

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

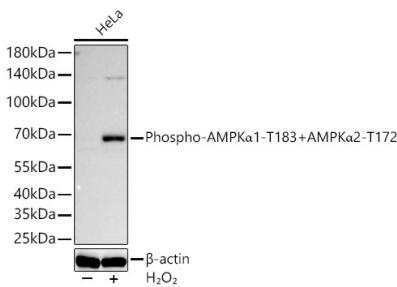
Storage

Store at -20°C

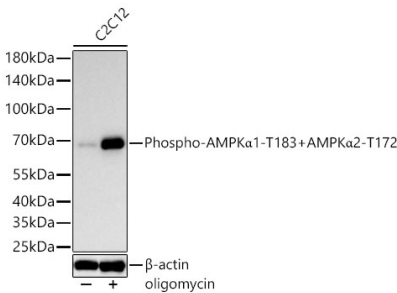
Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

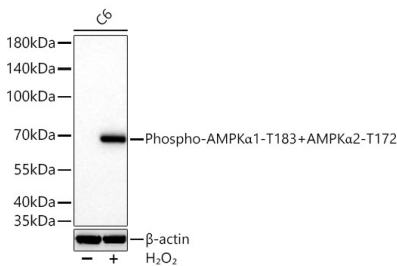
Validation Data



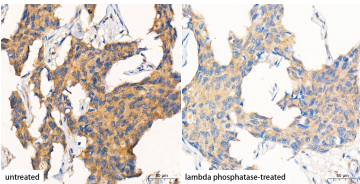
Western blot analysis of lysates from HeLa cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4°C. HeLa cells were treated with H₂O₂ (2 mM) at 37°C for 15 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.



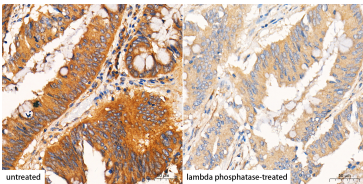
Western blot analysis of lysates from C2C12 cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4°C. C2C12 cells were treated with oligomycin (0.5 mM) at 37°C for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45 s.



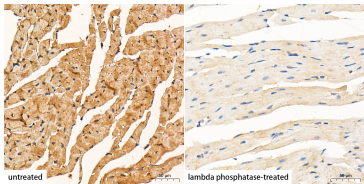
Western blot analysis of lysates from C6 cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4°C. C6 cells were treated with H₂O₂ (1 mM) at 37°C for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKα1-T183jiaAMPKα2-T172 Rabbit mAb (AP1656) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

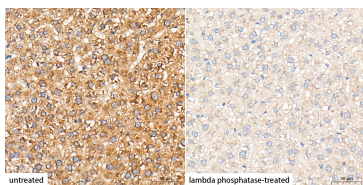


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKα1-T183jiaAMPKα2-T172 Rabbit mAb (AP1656) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse heart tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKα1-T183jiaAMPKα2-T172 Rabbit mAb (AP1656) at a dilution of 1:200 (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 liver tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPK α 1-T183jiaAMPK α 2-T172 Rabbit mAb (AP1656) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.