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Phospho-AMPKα1-T183+AMPKα2-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 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥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℃

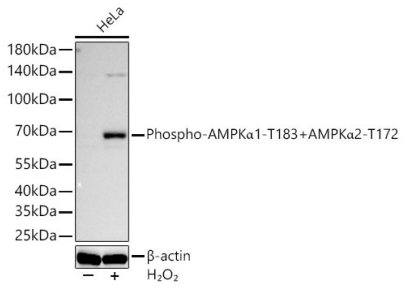
Contact

400-999-6126

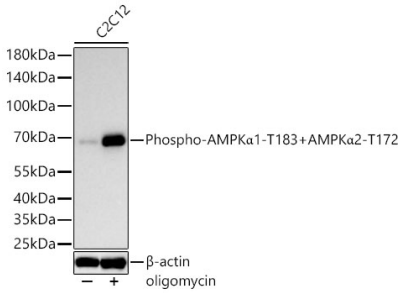
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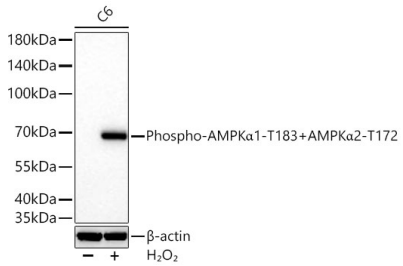
Validation Data



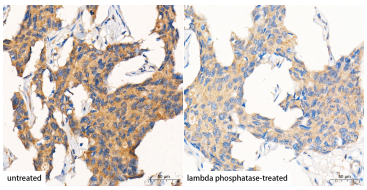
Western blot analysis of lysates from HeLa cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4℃. HeLa cells were treated with H_2O_2 (2 mM) at 37℃ for 15 minutes.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.|Lysates/proteins: 30 µg per lane.| Blocking buffer: 3% nonfat dry milk in TBST.| Detection: ECL Basic Kit (RM00020).| Exposure time: 60 s.



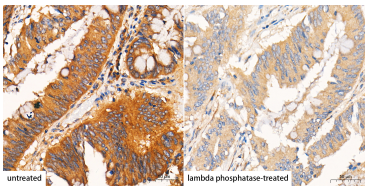
Western blot analysis of lysates from C2C12 cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4℃. C2C12 cells were treated with oligomycin (0.5 mM) at 37℃ for 30 minutes.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 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.



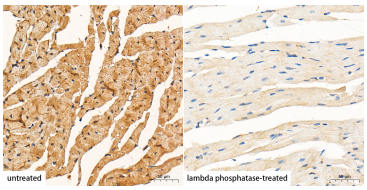
Western blot analysis of lysates from C6 cells using Phospho-AMPKα1-T183+AMPKα2-T172 Rabbit mAb (AP1656) at 1:10000 dilution incubated overnight at 4℃. C6 cells were treated with H_2O_2 (1 mM) at 37℃ for 30 minutes.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.|Lysates/proteins: 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.

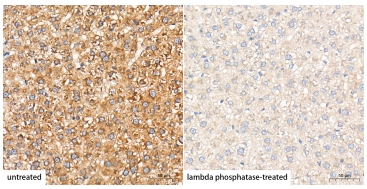


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-AMPKα1-T183jiaAMPKα2-T172 Rabbit mAb (AP1656) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer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

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