

Phospho-AMPK α 1-S485 Rabbit mAb

Catalog No.: AP1608

Recombinant

Basic Information

Observed MW

62 kDa

Calculated MW

64 kDa/66 kDa

Category

Primary antibody

Applications

WB, IF/ICC, ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC80828

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 - 1:16000**IF/ICC** 1:100 - 1:200

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

Swiss Prot

Q13131

Immunogen

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

Synonyms

AMPK; AMPK α 1; AMPK α 1; Phospho-AMPK α 1-S485

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

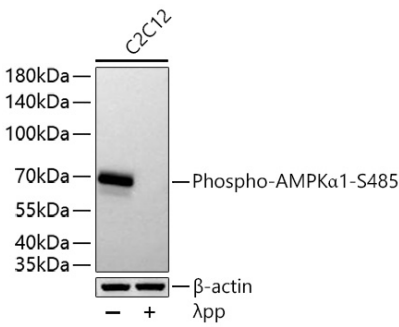
Store at -20°C. Avoid freeze / thaw cycles.

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

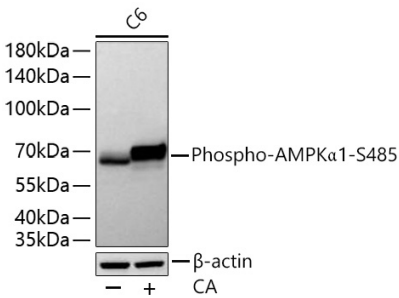
Contact

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

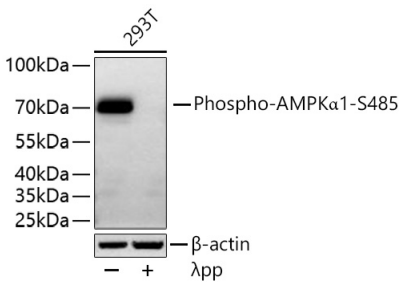
Validation Data



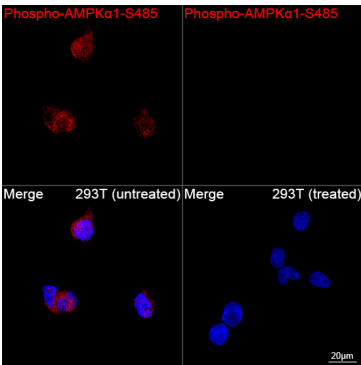
Western blot analysis of lysates from C2C12 cells using Phospho-AMPKα1-S485 Rabbit mAb (AP1608) at 1:8000 dilution incubated overnight at 4°C. C2C12 cells were treated with λpp (2 U/μL) at 30°C for 1 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45 s.



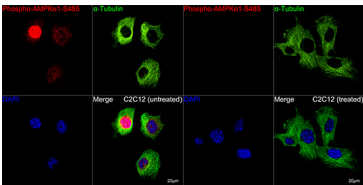
Western blot analysis of various lysates using Phospho-AMPKα1-S485 Rabbit mAb (AP1608) at 1:8000 dilution incubated overnight at 4°C. C6 cells were treated with CA (100 nM) at 37°C for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45 s.



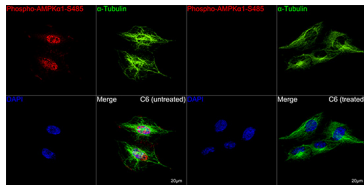
Western blot analysis of lysates from 293T cells using Phospho-AMPKα1-S485 Rabbit mAb (AP1608) at 1:8000 dilution incubated overnight at 4°C. 293T cells were treated with λpp (2 U/μL) at 30°C for 1 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.



Confocal imaging of 293T cells (untreated) and 293T cells (treated with λpp) using Phospho-AMPKα1-S485 Rabbit mAb (AP1608, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500)



Confocal imaging of C2C12 cells (untreated) and C2C12 cells (treated with λpp) using Phospho-AMPKα1-S485 Rabbit mAb (AP1608, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500)



Confocal imaging of C6 cells (untreated) and C6 cells (treated with λpp) using Phospho-AMPKα1-S485 Rabbit mAb (AP1608, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were

Validation Data

(Red). DAPI was used for nuclear staining (Blue). Objective: 100x.	(Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.	counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.
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