

AMPK alpha 1/2 Rabbit mAb

Catalog No.: A27740 2 Publications

Basic Information

Observed MW

64kDa

Calculated MW

64kDa

Category

Primary antibody

Applications

WB, IF/ICC, IHC-P, ELISA

Cross-Reactivity

Human, Mouse, Rat

Clone/No. number

ARC72811

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 1:12000 - 1:50000

IF/ICC 1:100 - 1:200

IHC-P 1:5000 - 1:20000

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

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

AMPK; AMPKa1; AMPK alpha 1; AMPK alpha 2; AMPKa2;

Contact

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|  | cn.market@abclonal.com.cn |
|  | www.abclonal.com.cn |

Product Information

Source

Rabbit

Isotype

IgG

Purification

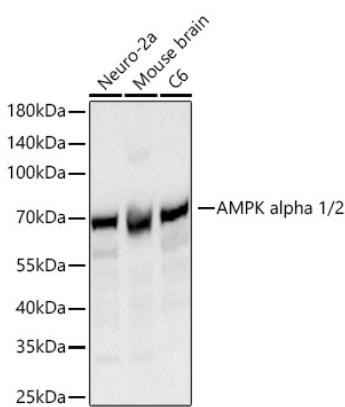
Affinity purification

Storage

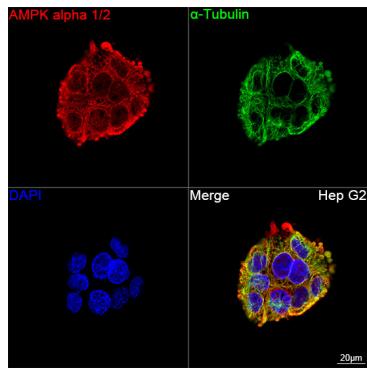
Store at -20°C. Avoid freeze / thaw cycles.

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

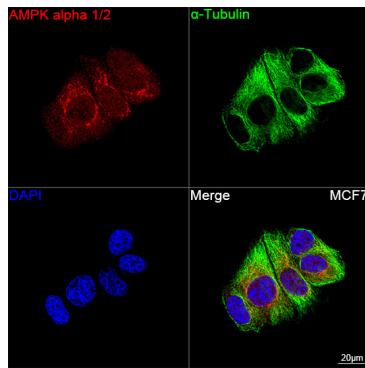
Validation Data



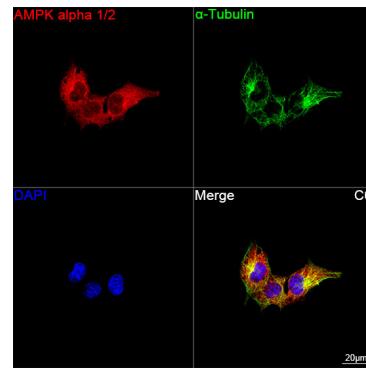
Western blot analysis of various lysates using AMPK alpha 1/2 Rabbit mAb (A27740) at 1:20000 dilution incubated overnight at 4°C.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 30s.



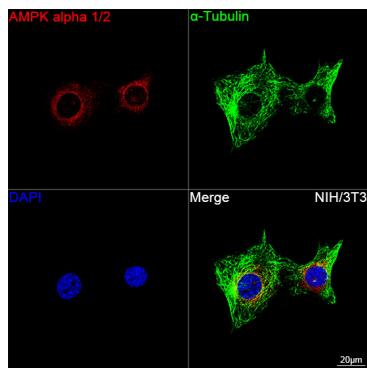
Confocal imaging of Hep G2 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



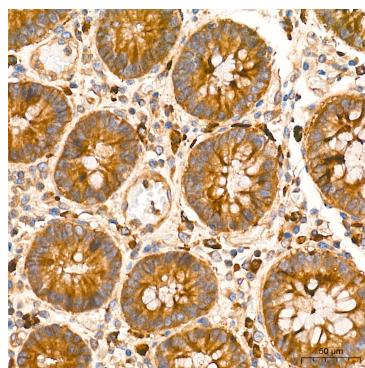
Confocal imaging of MCF7 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



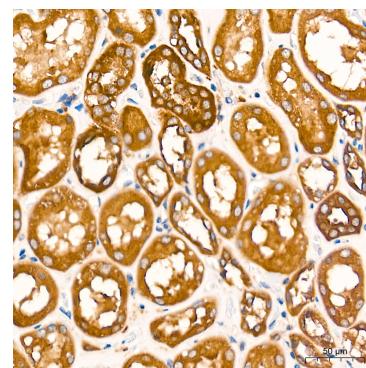
Confocal imaging of C6 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of NIH/3T3 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (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,



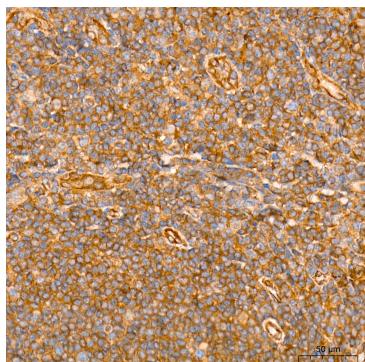
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



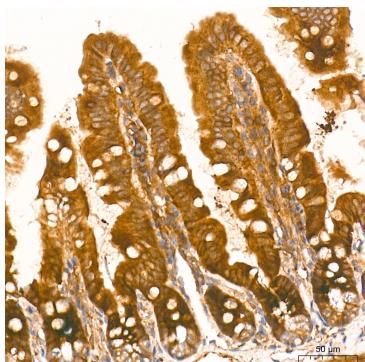
Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Validation Data

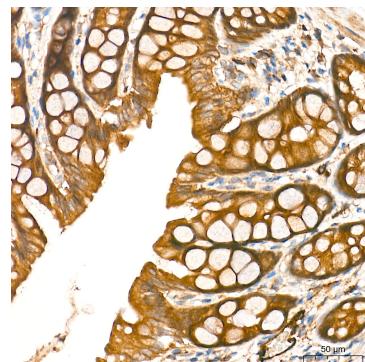
dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (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 using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (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 Rat colon tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.