

# 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

**CloneNo 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

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

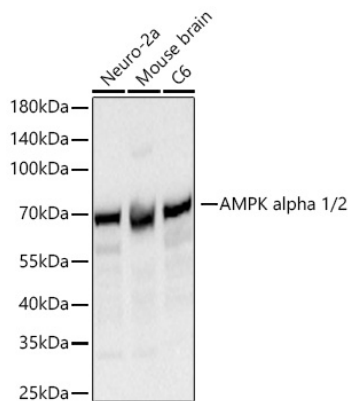
Affinity purification

**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.

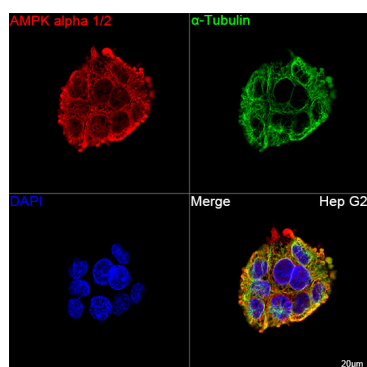
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

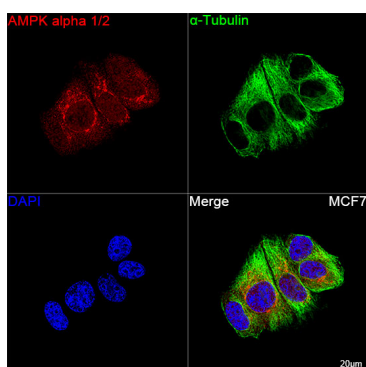
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

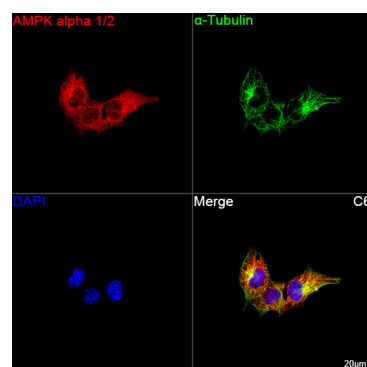
Exposure time: 30s.



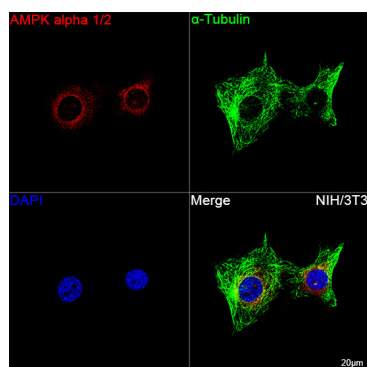
Confocal imaging of Hep G2 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation 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.



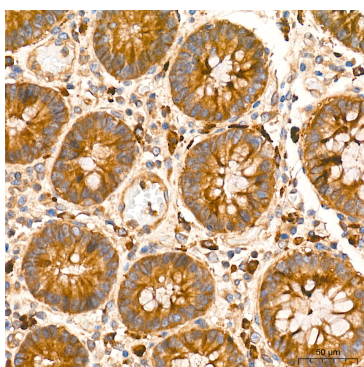
Confocal imaging of MCF7 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with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



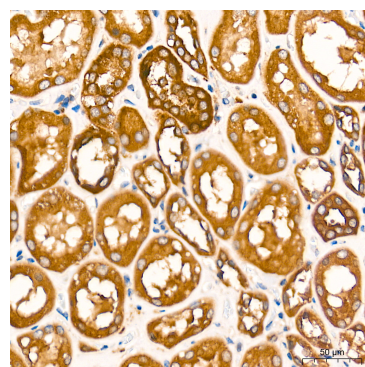
Confocal imaging of C6 cells using AMPK alpha 1/2 Rabbit mAb (A27740, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with 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  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076,



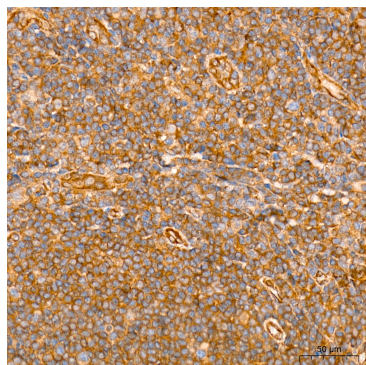
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



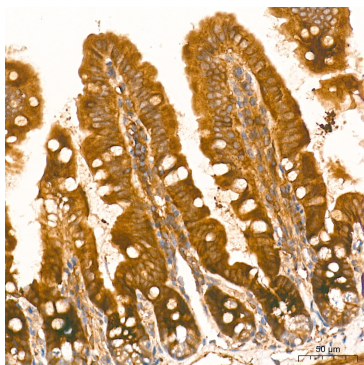
Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using AMPK alpha 1/2 Rabbit mAb (A27740) at a dilution of 1:10000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

## Validation Data

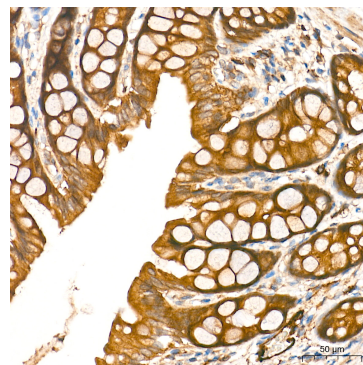
dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



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.