

# AMPK $\beta$ 1 Rabbit mAb

Catalog No.: A4344

Recombinant

2 Publications

## Basic Information

### Observed MW

38kDa

### Calculated MW

30kDa

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, ELISA

### Cross-Reactivity

Human, Mouse, Rat

### CloneNo number

ARC1061

## Background

The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex.

## Recommended Dilutions

WB 1:500 - 1:1000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

ELISA Recommended starting concentration is 1  $\mu$ g/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

5564

### Swiss Prot

Q9Y478

### Immunogen

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

### Synonyms

AMPK; HAMPKb; AMPK $\beta$ 1

## 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

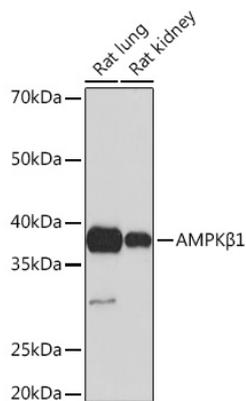
Affinity purification

### Storage

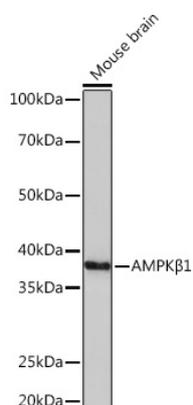
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

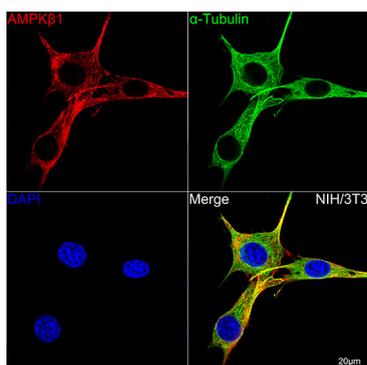
## Validation Data



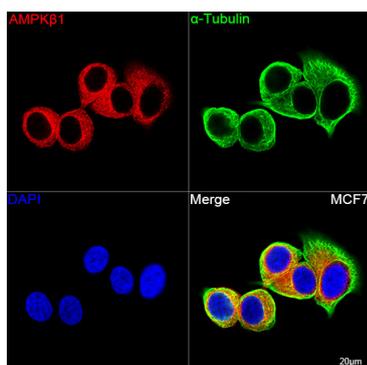
Western blot analysis of various lysates using AMPK $\beta$ 1 Rabbit mAb (A4344) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60s.



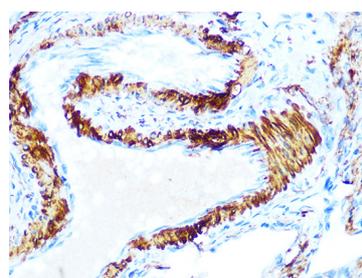
Western blot analysis of lysates from Mouse brain, using AMPK $\beta$ 1 Rabbit mAb (A4344) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 3min.



Confocal imaging of NIH/3T3 cells using AMPK $\beta$ 1 Rabbit mAb (A4344, dilution 1:100) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



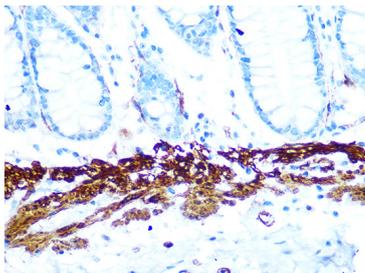
Confocal imaging of MCF7 cells using AMPK $\beta$ 1 Rabbit mAb (A4344, dilution 1:100) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Rat ovary using AMPK $\beta$ 1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.

## Validation Data

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Immunohistochemistry analysis of paraffin-embedded Human colon using AMPK $\beta$ 1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.