

AMPK β 1 Rabbit mAb

Catalog No.: A4344 **Recombinant** **1 Publications**

Basic Information

Observed MW

38kDa

Calculated MW

30kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P, IF/ICC

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

Immunogen Information

Gene ID

5564

Swiss Prot

Q9Y478

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 50-150 of human AMPK β 1 (Q9Y478).

SynonymsAMPK; HAMPKb; AMPK β 1

Contact

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

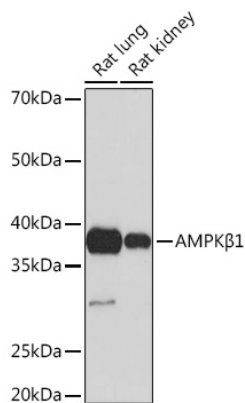
Affinity purification

Storage

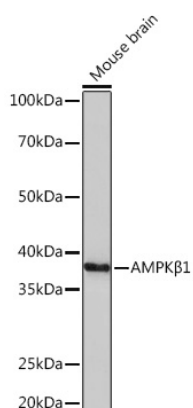
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

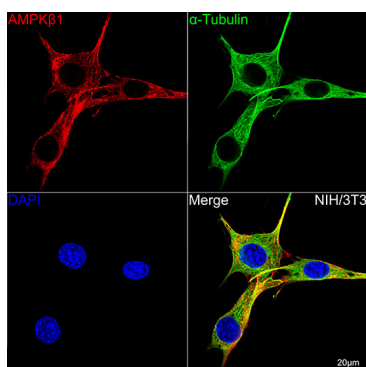
Validation Data



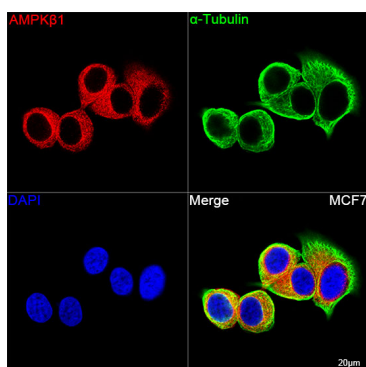
Western blot analysis of various lysates using AMPK β 1 Rabbit mAb (A4344) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: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



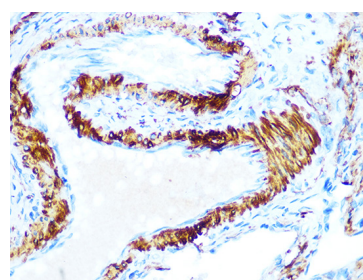
Western blot analysis of lysates from Mouse brain, using AMPK β 1 Rabbit mAb (A4344) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020).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



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

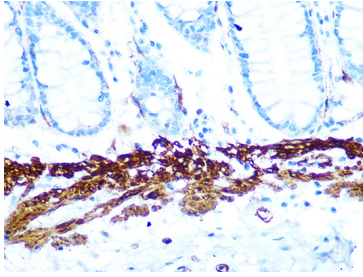


Confocal imaging of MCF7 cells using AMPK β 1 Rabbit mAb (A4344, dilution 1:100) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded rat ovary using AMPK β 1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.

Validation Data



Immunohistochemistry analysis of paraffin-embedded human colon using AMPK β 1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.