

A12491

Leader in Biomolecular Solutions for Life Science



## [KO Validated] AMPK $\beta$ 1 Rabbit pAb

Catalog No.: A12491

**KO** Validated

2 Publications

### Basic Information

#### Observed MW

38kDa

#### Calculated MW

30kDa

#### Category

Polyclonal Antibody

#### Applications

WB,IF/ICC,ELISA

#### Cross-Reactivity

Human,Mouse,Rat

### 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 - 1:2000

**IF/ICC** 1:50 - 1:100

### Immunogen Information

#### Gene ID

5564

#### Swiss Prot

Q9Y478

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human AMPK $\beta$ 1 (NP\_006244.2).

#### Synonyms

AMPK; HAMPKb;  $\beta$ 1

### Contact



[www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

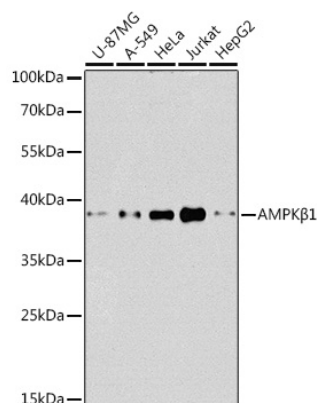
Affinity purification

#### Storage

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

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

## Validation Data



Western blot analysis of extracts of various cell lines, using AMPKβ1 antibody (A12491) at 1:1000 dilution.

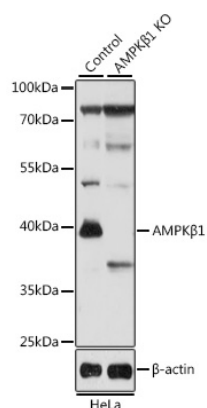
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25μg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Western blot analysis of extracts from normal (control) and AMPKβ1 knockout (KO) HeLa cells, using AMPKβ1 antibody (A12491) at 1:1000 dilution.

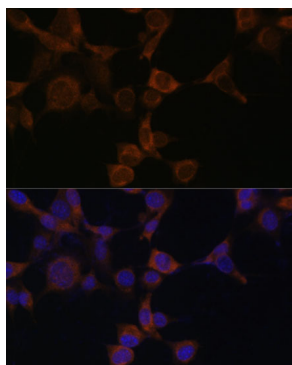
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25μg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 5s.



Immunofluorescence analysis of NIH-3T3 cells using AMPKβ1

Polyclonal Antibody (A12491) at dilution of 1:100 (40x lens). Blue:

DAPI for nuclear staining.