

[KO Validated] AMPK β 1 Rabbit pAb

Catalog No.: A12491 **KO** Validated

Basic Information

Catalog No.

A12491

Observed MW

38kDa

Calculated MW

30kDa

Category

Primary antibody

Applications

WB, IHC, IF

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:500 - 1:2000
IHC	1:50 - 1:100
IF	1:50 - 1:100

Contact

 | www.abclonal.com

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.

Immunogen Information

Gene ID	Swiss Prot
5564	Q9Y478

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human AMPK β 1 (NP_006244.2).

Synonyms

PRKAB1;AMPK;HAMPKb

Product Information

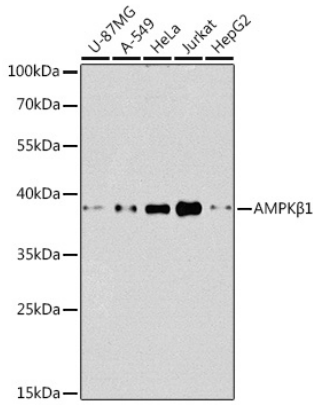
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

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.

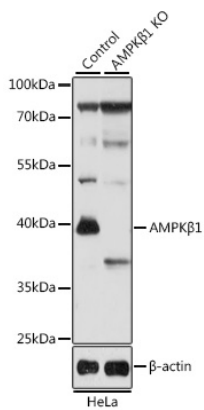
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug 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.

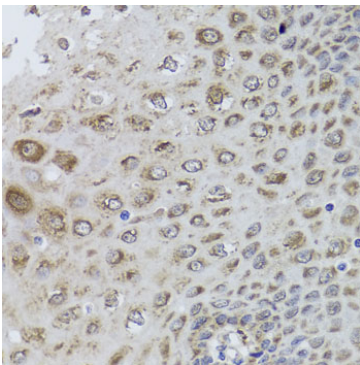
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

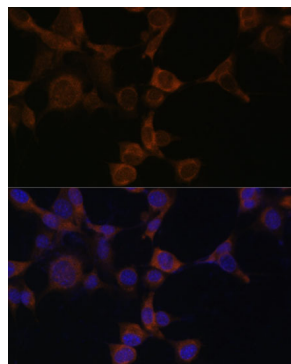
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 5s.



Immunohistochemistry of paraffin-embedded human esophagus using AMPKβ1 antibody (A12491) at dilution of 1:100 (40x lens).



Immunofluorescence analysis of NIH-3T3 cells using AMPKβ1 Polyclonal Antibody (A12491) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.