Leader in Biomolecular Solutions for Life Science

[KO Validated] AMPKβ1 Rabbit pAb

Catalog No.: A12491 KO Validated 1 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 Swiss Prot 5564 O9Y478

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human AMPKβ1 (NP 006244.2).

Synonyms

AMPK; HAMPKb; β1

Contact

www.abclonal.com

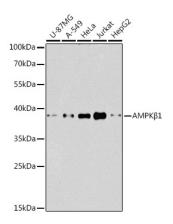
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

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



Western blot analysis of extracts of various cell lines, using AMPK\$1 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.

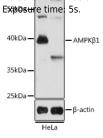
Western blot analysis of extracts from normal (control) and AMPK\$1 knockout (KO) HeLa cells, using

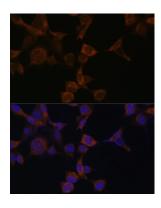
AMPKβ1 antibody (A12491) at 1:1000 dilution.

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

Lysales/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).





Immunofluorescence analysis of NIH-3T3 cells using AMPK $\beta1$ Polyclonal Antibody (A12491) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.