

## Product datasheet for **TA380335**

### AMPK beta 1 (PRKAB1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB,1:500 - 1:2000 IF,1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human AMPK $\beta$ 1 (NP_006244.2).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	30kDa
Gene Name:	protein kinase AMP-activated non-catalytic subunit beta 1
Database Link:	<a href="#">Entrez Gene 5564 Human Q9Y478</a>



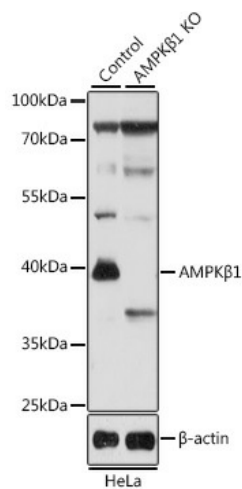
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**Background:**

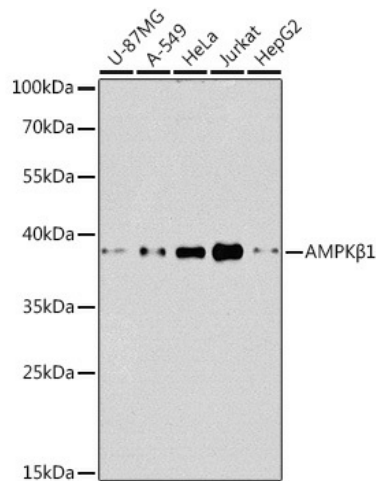
The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response 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.

**Synonyms:**

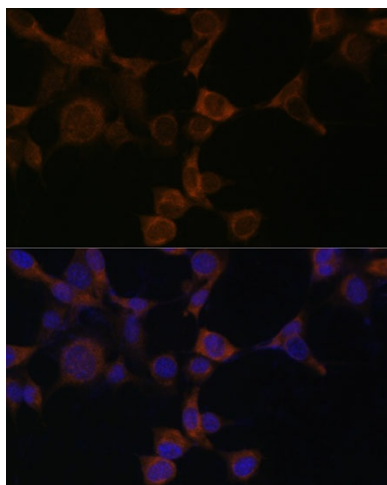
AMPK; AMPKb; HAMPKb; MGC17785

**Product images:**


Western blot analysis of extracts from normal (control) and AMPK $\beta$ 1 knockout (KO) HeLa cells, using AMPK $\beta$ 1 antibody (TA380335) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 5s.



Western blot analysis of extracts of various cell lines, using AMPK $\beta$ 1 antibody (TA380335) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 90s.



Immunofluorescence analysis of NIH-3T3 cells using AMPK $\beta$ 1 Polyclonal Antibody (TA380335) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.