

Product datasheet for TA380335S

OriGene Technologies, Inc.

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AMPK beta 1 (PRKAB1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, ICC/IF, WB

Recommended Dilution: WB.1:500 - 1:2000

IF/ICC,1:50 - 1:100

ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration

based on your specific assay requirements.

Reactivity: Human, Mouse, Rat

Modifications: Unmodified

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

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: Entrez Gene 5564 Human

Q9Y478



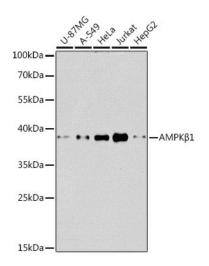


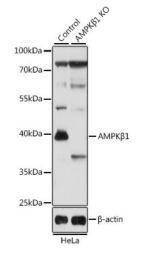
Background:

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 various lysates using [KO Validated] AMPKβ1 Rabbit pAb ([TA380335]) at 1:1000 dilution.

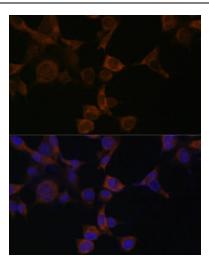
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.

Western blot analysis of lysates from wild type (WT) and AMPKβ1 knockout (KO) HeLa cells





Immunofluorescence analysis of NIH-3T3 cells using [KO Validated] AMPK β 1 Rabbit pAb ([TA380335]) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.