

## **Product datasheet for TA322521**

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## AMPK beta 1 (PRKAB1) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC

Recommended Dilution: IHC: 10-50

Positive control: Human stomach cancer

Predicted cell location: Cytoplasm

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic peptide corresponding to a region derived from 1-14 amino acids of Human

protein kinase, AMP-activated, beta 1 non-catalytic subunit

Formulation: PBS pH7.3, 0.05% NaN3, 50% glycerol

**Concentration:** lot specific

**Purification:** Antigen affinity purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** protein kinase AMP-activated non-catalytic subunit beta 1

Database Link: NP 006244

Entrez Gene 19079 MouseEntrez Gene 83803 RatEntrez 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.

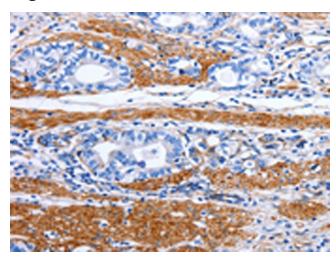
Synonyms: AMPK; HAMPKb

**Protein Families:** Druggable Genome

**Protein Pathways:** Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling

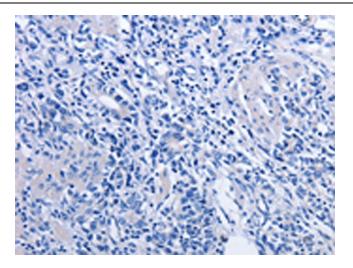
pathway

## **Product images:**

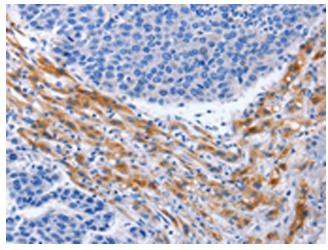


Immunohistochemistry of paraffin-embedded Human stomach cancer tissue using TA322521 (PRKAB1 Antibody) at dilution 1/15 (Original magnification: ×200)

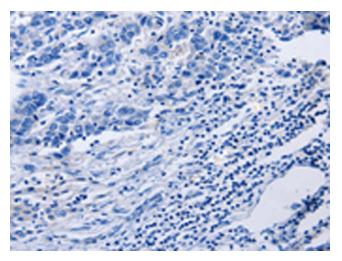




Immunohistochemistry of paraffin-embedded Human stomach cancer tissue using TA322521 (PRKAB1 Antibody) at dilution 1/15, treated with synthetic peptide. (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA322521 (PRKAB1 Antibody) at dilution 1/15 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA322521 (PRKAB1 Antibody) at dilution 1/15, treated with synthetic peptide. (Original magnification: ×200)