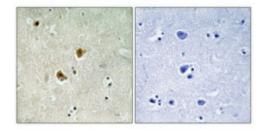


Anti-AMP beta antibody





Description Rabbit polyclonal to AMPKbeta1.

Model STJ91582

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

ImmunogenSynthesized peptide derived from human AMPKbeta1

Immunogen Region 10-90 aa, N-terminal

Gene ID <u>5564</u>

Gene Symbol PRKAB1

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000

Specificity AMPKbeta1 Polyclonal Antibody detects endogenous levels of AMPKbeta1

protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name 5'-AMP-activated protein kinase subunit beta-1 AMPK subunit beta-1

AMPKb

Molecular Weight 34 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:9378OMIM:602740</u>

Alternative Names 5'-AMP-activated protein kinase subunit beta-1 AMPK subunit beta-1

AMPKb

Function Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy

sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming

processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits

(PRKAG1, PRKAG2 or PRKAG3).

Sequence and Domain Family The glycogen-binding domain may target AMPK to glycogen so that other

factors like glycogen-bound debranching enzyme or protein phosphatases can

directly affect AMPK activity.

Post-translational Phosphorylated when associated with the catalytic subunit (PRKAA1 or

PRKAA2). Phosphorylated by ULK1; leading to negatively regulate AMPK activity and suggesting the existence of a regulatory feedback loop between

ULK1 and AMPK.

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Modifications

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