

### **AMPK beta 1 Antibody**

Rabbit mAb Catalog # AP90902

# **Specification**

### **AMPK beta 1 Antibody - Product Information**

Application WB, FC
Primary Accession Q9Y478
Reactivity Rat

Clonality Monoclonal

**Other Names** 

5"-AMP-activated protein kinase subunit beta-1; AMP-activated, noncatalytic, beta-1; AMPK; AMPK beta 1 chain; AMPK subunit beta-1; AMPK-BETA-1; AMPKb; HAMPKb; PRKAB1;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 30382 Da

# AMPK beta 1 Antibody - Additional Information

Dilution WB~~1:1000

Purification FC~~1:10~50
Affinity-chrom

Purification Affinity-chromatography
Immunogen A synthesized peptide derived from human

AMPK beta 1

Description AMP-activated protein kinase (AMPK) is

highly conserved from yeast to plants and

animals and plays a key role in the

regulation of energy homeostasis. AMPK is a heterotrimeric complex composed of a catalytic  $\alpha$  subunit and regulatory  $\beta$  and  $\gamma$  subunits, each of which is encoded by two or three distinct genes ( $\alpha$ 1, 2;  $\beta$ 1, 2;  $\gamma$ 1, 2,

3).

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### **AMPK beta 1 Antibody - Protein Information**

Name PRKAB1

**Synonyms AMPK** 

#### **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



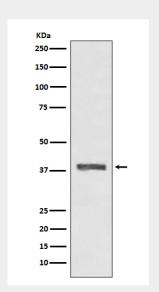
intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation 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).

### **AMPK beta 1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### AMPK beta 1 Antibody - Images



Western blot analysis of AMPK beta 1 expression in HeLa cell lysate.