

AMPK β Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10085**Specification**

AMPK β Antibody - Product Information

Application	WB, IHC, E
Primary Accession	Q9Y478
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30382

AMPK β Antibody - Additional Information**Gene ID** 5564**Application & Usage****The antibody can be used for ELISA (0.25 μ g/ml), Western blotting (0.5 - 2.5 μ g/ml) and Immunohistochemistry (2.5-5.0 μ g/ml).****Other Names**

AMPK, 5'-AMP-activated protein kinase, beta-1 subunit, AMP activated protein kinase beta-1 subunit, AMPK beta-1 chain, AMPKb

Target/SpecificityAMPK β **Antibody Form**

Liquid

Appearance

Colorless liquid

Formulation100 μ g (0.25 mg/ml) purified rabbit Ig polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.**Handling**

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**AMPK β Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AMPK β 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 β Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

AMPK β Antibody - Images

AMPK β Antibody - Background

AMPK beta-1 chain 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.