



AMPKy Antibody

Rabbit Polyclonal Antibody Catalog # ABV10086

Specification

AMPKy Antibody - Product Information

Application WB, IHC, E Primary Accession P54619

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 37579

AMPKγ Antibody - Additional Information

Gene ID 5571

Application & Usage The antibody can

be used for ELISA (0.25 μ g/ml), Western blotting (0.5 - 2.5 μ g/ml) and Immunohisto chemistry (2.5-5.0

 μ g/ml).

Other Names

AMPK, 5'-AMP-activated protein kinase, gamma-1 subunit, AMP activated protein kinase, gamma-1 subunit, AMPK gamma-1 chain, AMPKg

Target/Specificity ΑΜΡΚγ

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 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

AMPKγ **Antibody** - **Background**

AMPK gamma-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 is one of the gamma regulatory subunits of AMPK.



-20 °C

Background Descriptions

Precautions

AMPKγ Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AMPKy Antibody - Protein Information

Name PRKAG1

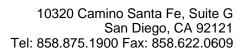
Function

AMP/ATP-binding 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. Gamma non-catalytic subunit mediates binding to AMP, ADP and ATP, leading to activate or inhibit AMPK: AMP-binding results in allosteric activation of alpha catalytic subunit (PRKAA1 or PRKAA2) both by inducing phosphorylation and preventing dephosphorylation of catalytic subunits. ADP also stimulates phosphorylation, without stimulating already phosphorylated catalytic subunit. ATP promotes dephosphorylation of catalytic subunit, rendering the AMPK enzyme inactive.

AMPKy Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





ImmunoprecipitationFlow CytometyCell Culture