

AMPK gamma 1 Rabbit mAb

Catalog # AP75072

Product Information

Application WB. IP P54619 **Primary Accession** Reactivity Human, Rat Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 37579

Additional Information

Gene ID 5571

Other Names PRKAG1

Dilution WB~~1/500-1/1000 IP~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid Storage

freeze/thaw cycles.

Protein Information

PRKAG1 Name

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 (PubMed:21680840, PubMed:24563466). 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

(PubMed:21680840, PubMed:24563466). AMPK acts via direct

phosphorylation of metabolic enzymes, and by longer-term effects via

phosphorylation of transcription regulators (PubMed:21680840,

PubMed:24563466). Also acts as a regulator of cellular polarity by remodeling

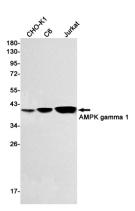
the actin cytoskeleton; probably by indirectly activating myosin

(PubMed:21680840, PubMed:24563466). 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 (PubMed:21680840,

PubMed: 24563466). ADP also stimulates phosphorylation, without stimulating already phosphorylated catalytic subunit (PubMed:21680840,

Images



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