AMPK Gamma 1 Mouse mAb

Catalog No	YP-Ab-17811
Isotype	IgG1/Kappa
Reactivity	Human,Rat
Applications	WB
Gene Name	PRKAG1
Alternative Names	AMPKg, PRKAG1
Research Field	Cell biology
Product Categories	Primary Antibodies
Host	Mouse
Molecular Weight	Calculated MW: 38 kDa; Observed MW:38 kDa
Clonality	Monoclonal Antibody
Clonality No.	R01-7N-7
Dilution	WB：1/500-1/1000
Immunogen	Peptide
Purification	Protein G
Conjugation	Unconjugated
Modification	Unmodified
Form	Liquid
Buffer System	Liquid in PBS, Glycerol and BSA
Concentration	1 mg/ml
Purity	≥90%
Storage	Store at -20°C. Avoid freeze/thaw cycles.
Background	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.

matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images