

## AMPK gamma 1 Rabbit mAb

Catalog No: #52141

Package Size: #52141-1 50ul #52141-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

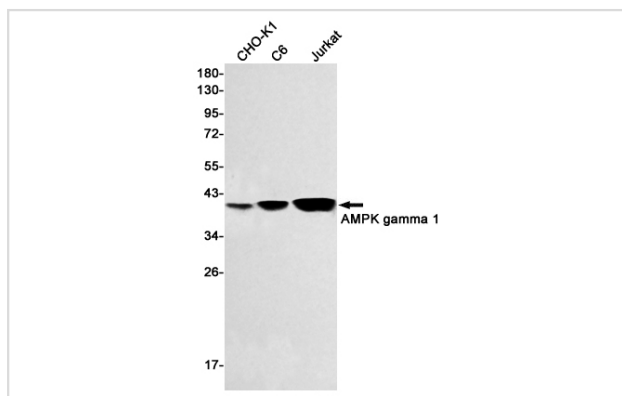
## Description

Product Name	AMPK gamma 1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S08-7D5
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human AMPK gamma 1
Conjugates	Unconjugated
Modification	Unmodification
Other Names	AMPKG
Accession No.	Swiss-Prot:P54619GenelD:5571
Uniprot	P54619
GenelD	5571
Calculated MW	Calculated MW: 38 kDa; Observed MW: 38 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Application Details

WB: 1/1000;

## Images



Western blot detection of AMPK gamma 1 in CHO-K1,C6,Jurkat cell lysates using AMPK gamma 1 Rabbit mAb(1:500 diluted).Predicted band size:38kDa.Observed band size:38kDa.

## Background

Swiss-Prot Acc.P54619.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.

Note: This product is for in vitro research use only