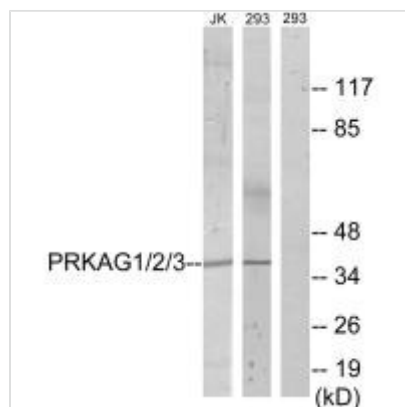




PRKAG1 Antibody

Product Code	CSB-PA086142
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P54619
Immunogen	Synthesized peptide derived from internal of Human PRKAG1/2/3.
Raised In	Rabbit
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous levels of total PRKAG1/2/3 protein.
Tested Applications	ELISA,WB;WB:1:500-1:3000
Relevance	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. Gao G., J. Biol. Chem. 271:8675-8681(1996). The MGC Project Team, Genome Res. 14:2121-2127(2004). Baba M., Proc. Natl. Acad. Sci. U.S.A. 103:15552-15557(2006).
Form	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Alias	5-AMP-activated protein kinase subunit gamma-1; AMPK gamma-1 chain; AMPKg; PRKAG1;
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	PRKAG1
Image	



Western blot analysis of extracts from Jurkat cells and 293 cells, using PRKAG1/2/3 antibody.