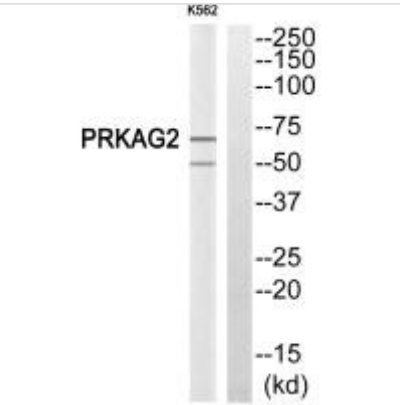
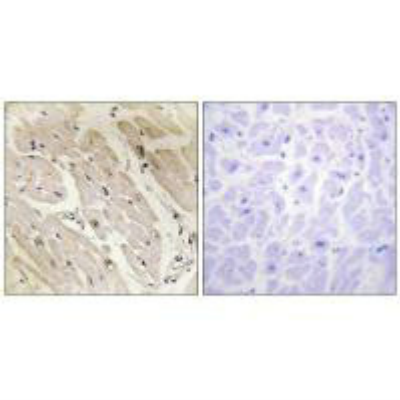
PRKAG2 Antibody

Product Code	CSB-PA147130
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9UGJ0
Immunogen	Synthesized peptide derived from internal of Human PRKAG2.
Raised In	Rabbit
Species Reactivity	Human,Mouse
Specificity	The antibody detects endogenous levels of total PRKAG2 protein.
Tested Applications	ELISA,WB,IHC,IF;WB:1:500-1:3000,IHC:1:50-1:100,IF:1:100-1:500
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. Cheung P.C.F., Biochem. J. 346:659-669(2000). Lang T.M., Genomics 70:258-263(2000). Ota T., Nat. Genet. 36:40-45(2004).
Form	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), 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-2; AAKG2; AMPK gamma-2 chain; AMPK gamma2; H91620p
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	PRKAG2
Image	



Western blot analysis of extracts from K562 cells, using PRKAG2 antiobdy.



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using PRKAG2 antibody.

Immunofluorescence analysis of A549 cells, using PRKAG2 antibody.