Best Tools for immunology Research

AMPKγ2 Polyclonal Antibody

Catalog No :	YT0222
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;ELISA
Target :	AMPKγ2
Fields :	>>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Apelin signaling pathway;>>Tight junction;>>Circadian rhythm;>>Thermogenesis;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease;>>Hypertrophic cardiomyopathy
Gene Name :	PRKAG2
Protein Name :	5'-AMP-activated protein kinase subunit gamma-2
Human Gene Id :	51422
Human Swiss Prot No :	Q9UGJ0
Mouse Gene Id :	108099
Mouse Swiss Prot No :	Q91WG5
Immunogen :	The antiserum was produced against synthesized peptide derived from human PRKAG2. AA range:1-50
Specificity :	AMPKγ2 Polyclonal Antibody detects endogenous levels of AMPKγ2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 65kD

Cell Pathway : Insulin Receptor; AMPK

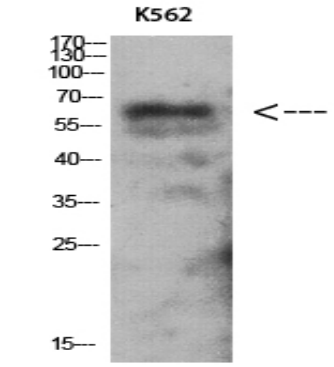
Background : AMP-activated protein kinase (AMPK) is a heterotrimeric protein composed of a catalytic alpha subunit, a noncatalytic beta subunit, and a noncatalytic regulatory gamma subunit. Various forms of each of these subunits exist, encoded by different genes. AMPK is an important energy-sensing enzyme that monitors cellular energy status and functions by inactivating key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This gene is a member of the AMPK gamma subunit family. Mutations in this gene have been associated with Wolff-Parkinson-White syndrome, familial hypertrophic cardiomyopathy, and glycogen storage disease of the heart. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jan 2015],

Function : disease:Defects in PRKAG2 are a cause of cardiomyopathy familial hypertrophic with Wolff-Parkinson-White syndrome (CHMWPWS) [MIM:600858]. HCM due to PRKAG2 mutations is probably due to polysaccharide storage in the heart. Defects in PRKAG2 may not be a frequent cause of HCM where no features of pre-excitation are found in affected individuals.,disease:Defects in PRKAG2 are a cause of glycogen storage disease of heart lethal congenital (GSDH) [MIM:261740]; also known as phosphorylase kinase deficiency of heart or congenital nonlysosomal cardiac glycogenosis. GSDH is a rare disease which leads to death within a few weeks to a few months after birth, through heart failure and respiratory compromise.,disease:Defects in PRKAG2 are the cause of Wolff-Parkinson-White syndrome (WPWS) [MIM:194200]; also known as preexcitation syndrome. It is the second most common cause of paroxysmal supraventric

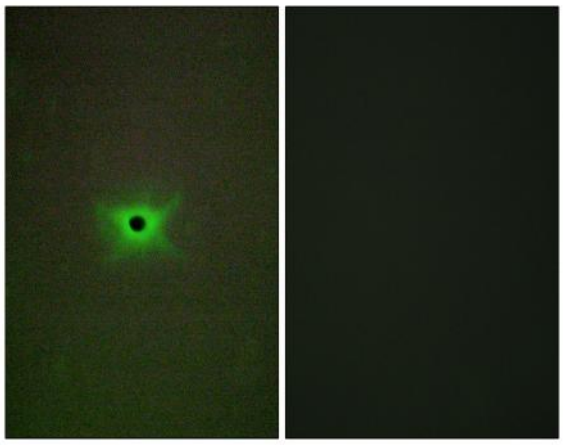
Subcellular Location : extracellular space,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,

Expression : Isoform B is ubiquitously expressed except in liver and thymus. The highest level is detected in heart with abundant expression in placenta and testis.

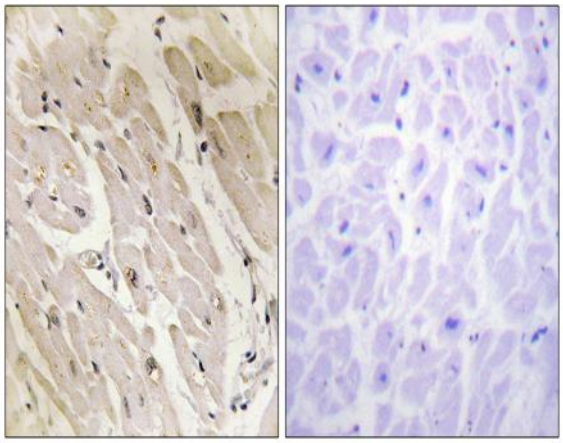
Products Images



Western Blot analysis of K562 using Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of A549 cells, using PRKAG2 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using PRKAG2 Antibody. The picture on the right is blocked with the synthesized peptide.