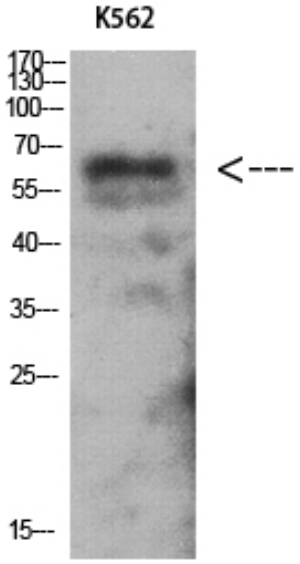
AMPKγ2 Polyclonal Antibody

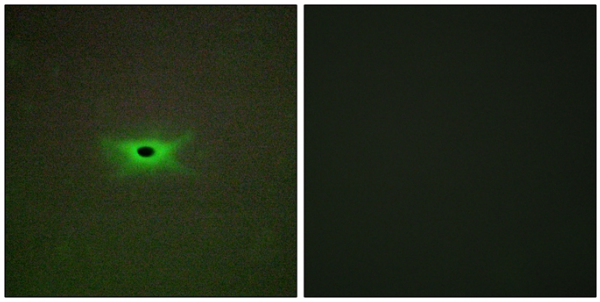
Catalog No	BYab-14663
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	PRKAG2
Protein Name	5'-AMP-activated protein kinase subunit gamma-2
Immunogen	The antiserum was produced against synthesized peptide derived from human PRKAG2. AA range:1-50
Specificity	AMPKγ2 Polyclonal Antibody 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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRKAG2; 5'-AMP-activated protein kinase subunit gamma-2; AMPK gamma2; AMPK subunit gamma-2; H91620p
Observed Band	65kD
Cell Pathway	extracellular space,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Tissue Specificity	Isoform B is ubiquitously expressed except in liver and thymus. The highest level is detected in heart with abundant expression in placenta and testis.
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
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],
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.

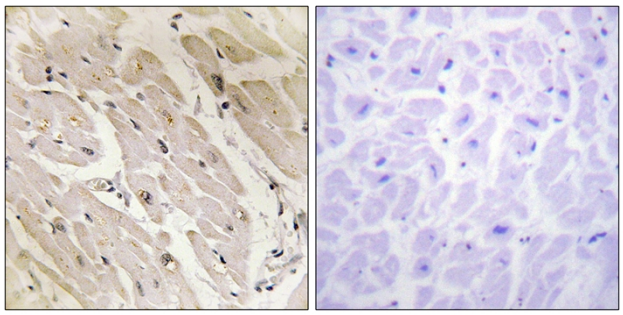
Products Images



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.