



AMPK γ 1/2/3 Polyclonal Antibody

Catalog No	YP-Ab-14662
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;ELISA
Gene Name	PRKAG1/PRKAG2/PRKAG3
Immunogen	The antiserum was produced against synthesized peptide derived from human PRKAG1/2/3. AA range:46-95
Specificity	AMPK γ 1/2/3 Polyclonal Antibody detects endogenous levels of AMPK γ 1/2/3 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. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRKAG1;5'-AMP-activated protein kinase subunit gamma-1;AMPK gamma1; AMPK subunit gamma 1;AMPK subunit gamma-1;AMPK γ 1/2/3;PRKAG1/PRKAG2/PRKAG3;AMPKg;PRKAG2;5'-AMP-activated protein kinase subunit gamma-2;AMPK gamma2;AMPK subunit gamma-2;H91620p;PRKAG3; AMPKG3;5'-AMP-activated protein
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	nucleoplasm,cytosol,membrane,nucleotide-activated protein kinase complex, extracellular exosome,
Tissue Specificity	Fetal liver,Muscle,Testis,
Function	function:AMPK is responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. Also regulates cholesterol synthesis via phosphorylation and inactivation of hydroxymethylglutaryl-CoA reductase and hormone-sensitive lipase. This is a regulatory subunit.,similarity:Belongs to the 5'-AMP-activated protein kinase gamma subunit family.,similarity:Contains 4 CBS domains.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a



gamma non-catalytic regulatory subunits. Interacts with FNIP1 and FNIP2.,

Background

The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008],

matters needing attention

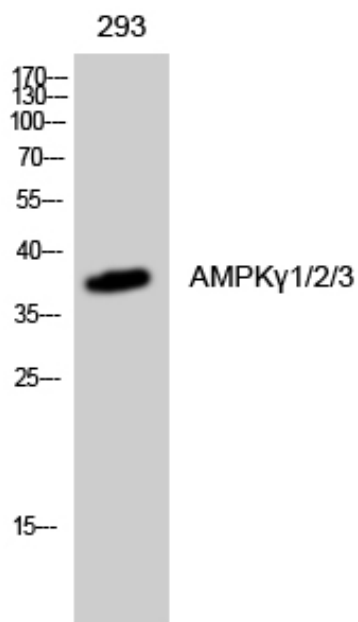
Avoid repeated freezing and thawing!

Usage suggestions

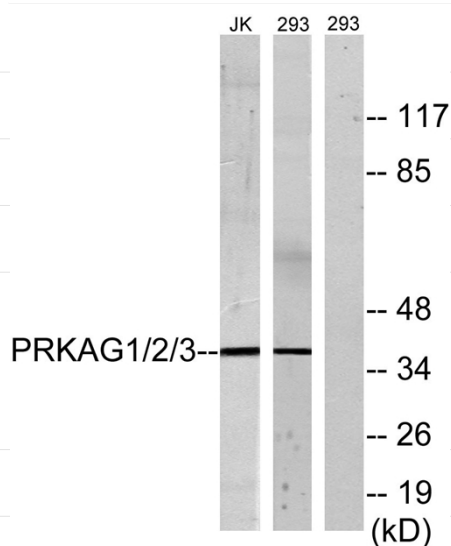
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



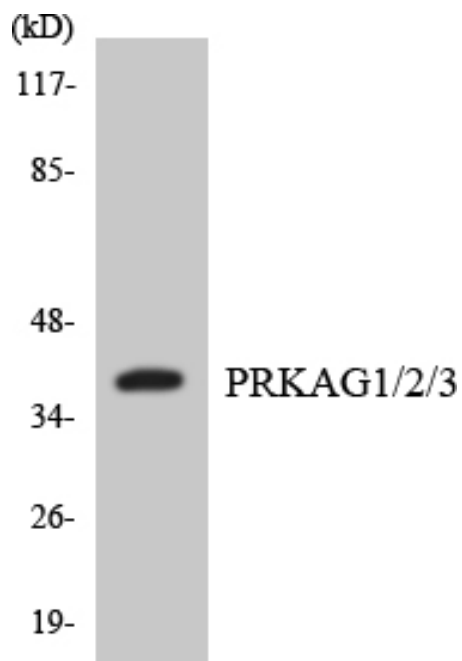
Products Images



Western Blot analysis of 293 cells using AMPK γ 1/2/3 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Western blot analysis of lysates from 293 and Jurkat cells, using PRKAG1/2/3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from 293 cells using PRKAG1/2/3 antibody.