

## **AMPKγ1/2/3 Polyclonal Antibody**

Catalog No: YT0221

Reactivity: Human; Mouse; Rat

**Applications:** WB;IF;ELISA

**Target :** AMPKγ1/2/3

**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: PRKAG1/PRKAG2/PRKAG3

**Protein Name:** 5'-AMP-activated protein kinase subunit gamma-1

P54619/Q9UGJ0/Q9UGI9

**Human Gene Id:** 5571/51422/53632/

**Human Swiss Prot** 

No:

Mouse Gene ld: 19082/108099/241113

Rat Gene Id: 25520

Rat Swiss Prot No: P80385

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

PRKAG1/2/3. AA range:46-95

Specificity: AMPKy1/2/3 Polyclonal Antibody detects endogenous levels of AMPKy1/2/3

protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source :** Polyclonal, Rabbit, lgG

1/3



**Dilution:** WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:5000. 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: 38kD

Cell Pathway: Insulin Receptor; AMPK

**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],

**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.,

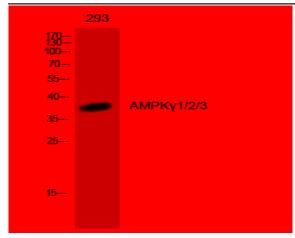
Subcellular Location:

nucleoplasm, cytosol, membrane, nucleotide-activated protein kinase

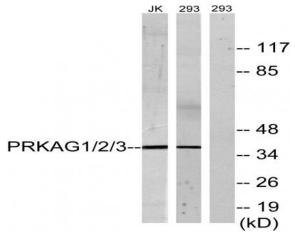
complex, extracellular exosome,

**Expression :** Fetal liver, Muscle, Testis,

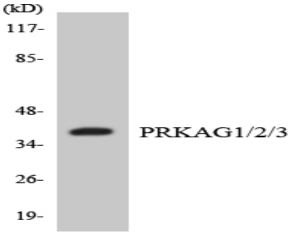
## **Products Images**



Western Blot analysis of 293 cells using AMPKγ1/2/3 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,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.