

Product Name: GK1 Rabbit Polyclonal Antibody**Catalog #: APRab11452**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight	57kDa

Antigen Information

Gene Name	GK
Alternative Names	GK; Glycerol kinase; GK; Glycerokinase; ATP:glycerol 3-phosphotransferase
Gene ID	2710.0
SwissProt ID	P32189
Immunogen	The antiserum was produced against synthesized peptide derived from human GK. AA range:461-510

Background

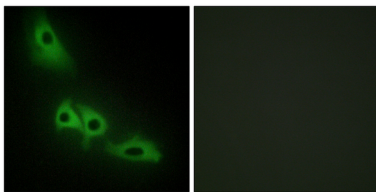
The protein encoded by this gene belongs to the FGGY kinase family. This protein is a key enzyme in the regulation of glycerol

uptake and metabolism. It catalyzes the phosphorylation of glycerol by ATP, yielding ADP and glycerol-3-phosphate. Mutations in this gene are associated with glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011],catalytic activity:ATP + glycerol = ADP + sn-glycerol 3-phosphate.,caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in GK are the cause of GK deficiency (GKD) [MIM:307030]. This disease can be either symptomatic with episodic metabolic and CNS decompensation or asymptomatic with hyperglycerolemia and hyperglyceroluria only.,function:Key enzyme in the regulation of glycerol uptake and metabolism.,pathway:Polyol metabolism; glycerol degradation via glycerol kinase pathway; sn-glycerol 3-phosphate from glycerol: step 1/1.,similarity:Belongs to the FGGY kinase family.,subcellular location:In sperm and fetal tissues, the majority of the enzyme is bound to mitochondria, but in adult tissues, such as liver found in the cytoplasm.,tissue specificity:Highly expressed in the liver, kidney and testis. Isoforms 2 and 3 are expressed specifically in testis and fetal liver, but not in the adult liver.,

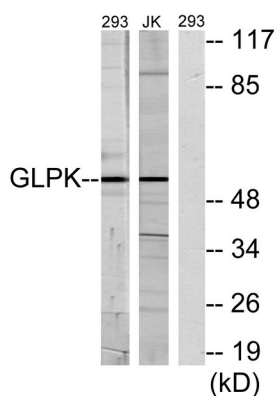
Research Area

Glycerolipid metabolism;PPAR;

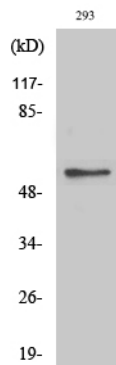
Image Data



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



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



Western Blot analysis of various cells using GK1 Polyclonal Antibody diluted at 1: 20 00