

Summary

Production Name	GK1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	57kD

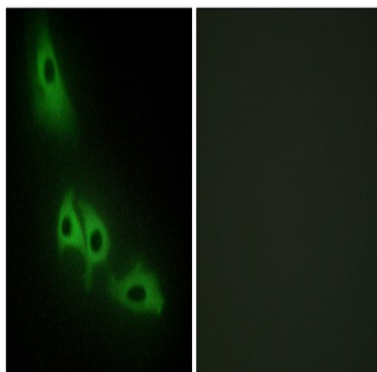
Background

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

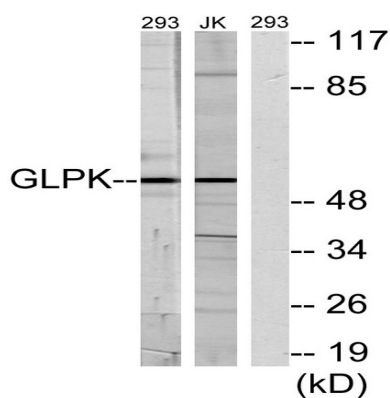
Glycerolipid metabolism; PPAR;

Image Data

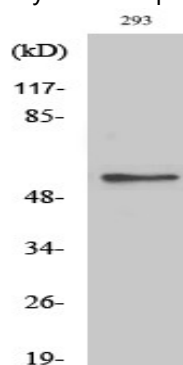


Immunofluorescence analysis of HeLa cells, using GK Antibody. The picture on the right is blocked with the synthesized peptide.

Product Name: GK1 Rabbit Polyclonal Antibody
Catalog #: APRab11452



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: 2000

Note

For research use only.