

Product Name: GK1/3 Rabbit Polyclonal Antibody
Catalog #: APRab11453



Summary

Production Name	GK1/3 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

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/GK3P GK; Glycerol kinase; GK; Glycerokinase; ATP:glycerol 3-phosphotransferase; GK3P;
Alternative Names	GKP3; GKTB; Putative glycerol kinase 3; GK 3; Glycerokinase 3; ATP:glycerol 3-phosphotransferase 3; Glycerol kinase; testis specific 1
Gene ID	2713.0
SwissProt ID	P32189/Q14409.The antiserum was produced against synthesized peptide derived from human GK3. AA range:21-70

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000
Molecular Weight	61kD

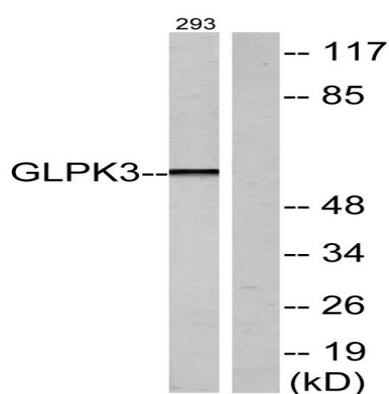
Background

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

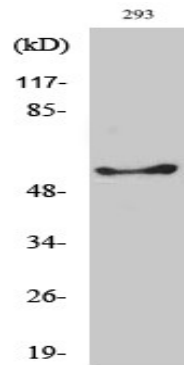
Glycerolipid metabolism;PPAR;

Image Data



Western blot analysis of lysates from 293 cells, using GK3 Antibody. The lane on the right is blocked with the synthesized peptide.

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Western Blot analysis of various cells using GK1/3 Polyclonal Antibody

Note

For research use only.